



OFFICE OF THE COUNTY MEDICAL OFFICER OF HEALTH,
14, TEMPLE STREET, BIRMINGHAM,

MAY 31st, 1904.

TO THE WARWICKSHIRE COUNTY COUNCIL.

MR. CHAIRMAN, MY LORDS AND GENTLEMEN,

1. I have the honour to hand you herewith my fifth annual report as County Medical Officer of Health, and the fifteenth I have made to your Council on the health of the administrative County.
2. I propose to adopt, generally, the same system as in my last year's report, namely, to deal with the County as a whole first, and complete it by summaries of the district reports. In the statistics, the birth, death, and Zymotic death rates are calculated per 1,000 persons estimated to be living, while the infant mortality is reckoned on children who died under one year of age per 1,000 registered births.

THE COUNTY AS A WHOLE.

AREA.

3. As there has been no change in the boundaries of the County or of any of the districts, the area remains the same as last year, both for the Urban and Rural districts, the figures respectively being 54,799 and 494,895 acres, giving a total for the County of 549,694 acres.

POPULATION.

4. In my report of two years ago I was able to give the population as found at the census of 1901, but in years in which no census is taken it is necessary to estimate, as accurately as possible, the number of people living in the County.
5. I find the District Medical Officers of Health estimate the population to the middle of 1903 to have been 361,339. As in past years the chief increases to be noted are in those districts near Birmingham, namely Erdington and Sutton Coldfield, and the manufacturing districts in the north-east of the County, namely Nuneaton and Chilvers Coton, Atherstone, Foleshill, and Tamworth; and also in the Urban district of Rugby.
6. It is obvious that the accuracy of the various rates calculated depends upon a correct knowledge of the population of the County, and I am very pleased to see that it is possible that in the future a quinquennial census will be taken, instead of a decennial one as at present, by means of which the value of the statistics in those years removed from the census will be considerably increased.

BIRTHS.

7. Nine thousand five hundred and twenty-one births were registered, compared with 9,600 in 1902 and 9,685 in 1901. Calculated on the estimated population the birth-rate is 26·34 per thousand, compared with 27·07 in 1902 and 27·84 in 1901. It will be noticed therefore, that, as is the case throughout the country generally, a decrease in the birth-rate is to be recorded. Our birth-rate is below the average of the whole of England and Wales, the birth-rate being, for 1903, 28·4. There has been a decrease in both the Urban and the Rural districts. In the former the rate was 26·09, compared with 26·07 in the previous year, and in the Rural districts 26·71 compared with 27·79.
8. In the Urban districts the highest birth-rate was, as is nearly always the case, in Nuneaton and Chilvers Coton, where it reached the figure of 34·8, compared with 34·6 in 1902. Of all the Urban districts the lowest rate was to be found in Leamington, though it was nearly as low in Kenilworth and Stratford-on-Avon. In the Rural districts, Foleshill, Tamworth and Atherstone have the highest rates, namely 37·1, 35·8, and 34·1 respectively.
9. We have again, therefore, the curious fact that in two Rural districts we have a higher birth-rate than is to be found in any of the Urban ones. The lowest birth-rate is to be found in the small district of Coventry, where it was only 14·7, but in only two other districts, namely Warwick Rural and Farnborough, was the rate below twenty, and here it was 18·8.
10. This constant decrease in the birth-rate, though a matter perhaps outside the scope of public health, is of such importance for the future well-being and safety of the country that it is impossible to record these diminishing rates without feeling the grave danger which it betokens. Perhaps in nowhere has it been better shown than in the Borough of Aston Manor. In the Annual Report of the Medical Officer of Health a Chart is given, which is reproduced in the Appendix, showing that the birth-rate has fallen, and fallen practically consistently, from 44 in 1874 to 28·7 in 1903. A consideration of all the causes leading to this decline would undoubtedly be out of place here, but I cannot refrain from calling the attention of the public generally to the fact that if the production of healthy children is to be checked as it has been of late years we must expect a progressive moral and physical deterioration, while at the same time it must not be forgotten that the main source of strength of the Empire is being lost, with results which can only be looked forward to with the most serious apprehension. As I have before stated, the human element is the main factor of power, and no increase of wealth can compensate a nation for the loss of virile citizens, on which the ultimate safety of the country must depend.

DEATHS.

11. Four thousand nine hundred and forty-nine deaths were registered in the County during the year, 2,938 in the Urban and 2,011 in the Rural districts, giving a death-rate of 13·69, compared with 13·45 in 1902 and 14·48 in 1901. It will be seen, therefore, that our death-rate has practically remained the same as in the previous year, but is considerably lower than in 1901.
12. In the Urban districts the lowest rates were recorded in Erdington, Rugby and Sutton Coldfield, these being the only districts with a death-rate under twelve. It is also very satisfactory to note that in only one instance, namely that of the Borough of Stratford-on-Avon, did the death-rate exceed fifteen, in any of the districts of the County.
13. In the Rural districts the lowest rates were to be found at Coventry, Castle Bromwich, Solihull and Warwick; in all these instances the rate was under twelve. In only two instances, namely Southam and Tamworth, did the death-rate exceed fifteen, and here only slightly, so that it is particularly gratifying to note that the lowness of the death-rate has been common to nearly all the districts of the County.
14. The death-rate for the whole of England and Wales was 14·8.

ZYMOTIC DISEASE.

15. Four hundred and nineteen deaths were registered as due to the seven principal Zymotic diseases, compared with 384 in 1902 and 520 in 1901. Allowing for the increase of population, therefore, it will be seen that there has been only a very slight increase in the mortality from infectious disease, while compared with the two previous years the decrease has been marked. The deaths registered were as follows :— Smallpox 3, Measles 86, Scarlet Fever 46, Diphtheria 42, Whooping Cough 58, Fever 17, and Diarrhoea 167.



Warwickshire County Council.

14, Temple Street,

Birmingham,

9th July, 1904.

A. Bostock Hill, M.D., D.P.H.Camb.,
County Medical Officer of Health.

With the Compliments of the

County Medical Officer of Health.

It will thus be seen that only in the case of Smallpox, Measles and Diarrhoea has there been any increase, while in the case of Whooping Cough the number of deaths was only one half, while there was also a reduction in the mortality from Scarlet Fever and Diphtheria. I said last year that there was a most gratifying reduction in the number of deaths from Typhoid Fever, and the same remark may be repeated this year, when the number of fatal cases is further reduced from 35 to 17, with a slightly increased population. The Zymotic death-rate for the year is 1·15, compared with 1·08 in 1902 and 1·4 in 1901.

In the Urban districts the number of deaths from Zymotic disease was 289 compared with 266 in 1902 and 360 in 1901. This gives us the very satisfactory rate of 1·35, practically identical with that of the previous year.

16. In the Rural districts the deaths numbered 130, giving for the second year a very low figure, namely 0·87 per thousand, practically identical with last year, which was as I then said, the lowest recorded Zymotic death-rate for the Rural districts.
17. **SMALLPOX.**—For the first time for many years Smallpox may be said to have been somewhat prevalent in parts of the County, in fact in some districts a fairly large number of cases occurred. Altogether 130 were notified, namely 80 in the Urban districts and 50 in the Rural ones. In the Urban ones the cases occurred as follows:—Aston Manor 31, Erdington 20, Nuneaton and Chilvers Coton 12, Leamington 1, Rugby 9, Stratford-on-Avon 2, and Warwick 5.
18. In the Rural districts the disease was chiefly prevalent in Foleshill where 36 cases occurred, and the other districts from which it was notified were Alcester 1, Atherstone 2, Castle Bromwich 1, Coventry 4, Meriden 1, Rugby 1, Solihull 1, and Southam 3. I have dealt very fully in my summaries of the reports of the district medical officers of health with these outbreaks, and therefore need not deal at any great length with them now, but one or two points deserve attention. First of all, the extraordinary mildness of the cases, for, out of the 130 cases notified, only 3 proved fatal, giving therefore a per-centage mortality of 2·3.
19. I pointed out in my report for 1902 that in many instances the cases then notified were due to tramps bringing infection from places outside the county. I called attention then to the danger, and suggested that it would probably be desirable for communities to take some means to protect themselves from these unsavoury visitors. Since then much information has been collected by Dr. Armstrong, the Medical Officer of Health for Newcastle-upon-Tyne, on this subject, and a report has been published showing how the work of disseminating Smallpox by tramps has taken place throughout the country at large. This report shows among other things that in 51 % of the districts affected in 1903 the disease was first introduced by vagrants.
20. The question of what can be done is a very complicated one, and the opinions of those most qualified to give them differ considerably. There can, however, be little doubt that something should be done to prevent this periodic dissemination of disease, and I am convinced in my own mind, that the suggestion I made in my last year's report would considerably mitigate the evil, namely that unless a tramp can show on asking for shelter, he has been efficiently vaccinated within ten years, that the operation be performed again.
21. I am of opinion, however, that though this might palliate the danger as regards disseminating Smallpox, much more is required. The tramp is undoubtedly a parasite on society. He prefers to live on others under any conditions rather than work, and it seems difficult therefore to give a sufficient reason why he should be encouraged in these ways at the expense of the public and to the detriment of health and morality.
22. **MEASLES.**—This disease has again caused a comparatively small mortality. The deaths registered numbered 86, compared with 57 in the previous year. The mortality was much more marked in the Urban than in the Rural districts, 56 deaths occurring in the former.
23. Though I have frequently before called attention to it, I cannot refrain from again stating that it will be seen that Measles was the most fatal of all the infectious diseases of childhood. This apparently arises from ignorance, there being a wide-spread delusion that this is a disease which every child must have, and the sooner it has it the better. As, however, a very large proportion of the deaths occur in children under five years of age, it is obvious that it is to the public welfare that the catching of the disease should not be encouraged, and that therefore more care should be taken when children are infected to prevent the spread from one family to another. It is difficult to prevent its spread in the same house, because it is a disease which is infectious before the rash appears, when it can be diagnosed, and if there are other susceptible children, they nearly always become infected before means can be taken to isolate the patient.

24. **SCARLET FEVER.**—This disease remained again very prevalent throughout the year; the number of cases notified was 1,927, compared with 1,824 in 1902. It was most prevalent in the autumn, as is always the case, and in the second week of October (the 42nd of the year) the number of cases recorded was no less than 67. The maximum in the previous year was reached in the 44th week, or the last week in October, and the number of cases then notified was 63.
25. The disease has been fairly prevalent in both the Urban and the Rural districts, in fact cases have occurred in every district in the County with the exception of the small Rural district of Coventry, with a population of only 340. Its prevalence, however, has varied considerably. In the Urban districts it has been chiefly prevalent in Rugby, for 208 cases have been notified from there. In the Rural districts very marked prevalence has been shown both at Atherstone and Tamworth, and I have dealt with these outbreaks in the districts named in my summaries of the reports.
26. As regards the mortality from the disease, it will be noticed that it was greater in the Rural than in the Urban districts, there having been 24 deaths in the former compared with 22 in the latter, though there were more cases notified in the Urban than in the Rural, the figures being 1,055 in the Urban and 872 in the Rural. This result has been brought about by the severe epidemics at Atherstone and Tamworth.
27. **DIPHTHERIA AND MEMBRANOUS CROUP.**—I am again able to record a further decrease in the number of deaths from this disease, the total number registered being 42, compared with 45 in 1902 and 59 in 1901. The number of cases has also been slightly less, though practically identical, namely 300, compared with 304 in the previous year. In the Urban districts the disease was chiefly prevalent in Erdington, seven deaths occurring there, while in the Rural districts Foleshill showed the highest mortality, there also being seven deaths notified there.
28. The largest number of cases notified, however, was in Foleshill, where 45 were reported, while in Aleester and Atherstone the numbers respectively were 18 and 16. It is curious to observe how this disease appears in some form or other with great regularity in certain districts. In some of these it is not associated, as far as one can tell, with insanitary conditions, and probably at the present time it is quite fair to state that there is no infectious disease about which so little is known as regards the causes of its origin and means of spreading.
29. **WHOOPING COUGH.**—This disease was very much less prevalent than in the previous year judging from the mortality which occurred. Only 58 deaths were registered from it, compared with 118 in 1902. It was much more prevalent in the Urban than in the Rural districts, 40 deaths occurring in the former, compared with 18 in the latter. It is a disease almost entirely fatal in children under five years of age, the bulk of the mortality occurring in children under two years of age. For this reason it is very liable to recur in epidemic form every two years, and as the number of deaths was somewhat large in 1902, it was to be expected that we should have a diminished mortality in the year under review. As in the case of Measles, unnecessary exposure to infection is constantly taking place, with the result that in the case of very young children the mortality is maintained at a figure which may be said to be absolutely unnecessary.
30. **FEVER, including TYPHOID and other continued fevers.**—It is most gratifying to me to be able to record a further diminution in the mortality from this disease. It is particularly gratifying to be able to show a progressive diminution each year since I have held office as County Medical Officer of Health. In 1900 the deaths numbered 84, in 1901, 47, in 1902, 35, and in 1903, 17. The number of cases which occurred was exactly the same number as in the previous year, so that the disease was much less virulent, only half the number of cases proving fatal.
31. Of the 175 cases, 125 occurred in the Urban and 50 in the Rural districts. Among the Urban ones, Aston Manor was the only district which showed a serious number of cases, 77 being reported from there. I must again point out that in Erdington, where the number of cases appears somewhat large, the excessive number is due to the fact that the Workhouse for the whole of the Union is situated here, and patients are removed from Aston Manor, the City of Birmingham, and certain other portions of the County. As regards Erdington itself the number of cases was very small. In the Rural districts, Rugby was the only district seriously affected, 24, or nearly 50 per cent of the whole of the cases occurring there. This prevalence is dealt with in my summary of the report of the district medical officer of health.

32. I have before called attention to the fact that there is no such valuable index of the sanitation of a district or series of districts as the rate of mortality of Typhoid Fever. It is therefore a matter for great congratulation to again have to record such a diminished mortality as I am able to do this year.
33. In connection with this matter I may point out that in Aston Manor the Medical Officer of Health calls attention to the effect of sanitation upon this disease, and I have quoted at some length extracts from his report in my summary annexed hereto.
34. Another point, however, to which I think attention should be called is the danger of the spread of this disease by means of oysters and other shellfish taken from grounds receiving sewage. This is a danger which has been shown to be somewhat serious of late years, owing to the development of bacteriological research, and it is interesting to note that in the Urban district of Erdington three of the cases of Typhoid Fever were, almost without doubt, traced to the consumption of oysters or other shellfish. This points to the fact that it will be very necessary for supervision to be carried out over oyster beds, particularly where there is any danger of pollution with sewage. In many instances the Typhoid bacillus has been found flourishing in oysters, and if such are eaten by susceptible persons, the disease is almost certain to arise. The danger is a subtle one, because when the oysters are gathered and offered for sale no deterioration in condition is to be observed, nor indeed is there any point to be noticed which can give warning of the danger.
35. Dr. J. O. ORTON also calls attention to the diminution of Typhoid in Foleshill, a district which for many years was one of its Warwickshire homes, and ascribes the altered conditions largely to the improved water supply of Bedworth.
36. DIARRHŒA.—This disease has shown an increased fatality, as 167 deaths were recorded, compared with 74 in the previous year, but it must be remembered that the number in 1902 was phenomenally low, for in 1901, 256 deaths occurred, and in 1900, 275. The main factor in the production of this disease, which almost entirely affects infantile life, is warmth of soil, and therefore in a cool summer such as we had in 1903 and in 1902 one would expect those septic conditions which are largely associated with the prevalence of the disease to be reduced. It must not be forgotten, however, that under certain climatic conditions, foul condition of soil, dirt in and around dwellings and improper storage of food, largely predispose to attacks. Over-crowding on space also appears to have an important bearing, and it is interesting to observe that of the 167 deaths, 134 occurred in the Urban districts, and 102 of these in Aston Manor.
37. I append to the Report the usual chart showing the number of cases of the three principal Zymotic diseases notified in each week of the year.
38. PHTHISIS.—This disease has produced a greater mortality than in the two previous years, the number of deaths registered from it being 329, compared with 235 and 284 for 1902 and 1901 respectively. No doubt public opinion has been much stirred of late by what has been done in enlightening people as to the infectious nature of this malady, and the measures by which it may be prevented, and it is hardly stating the matter too definitely to say that we have now the knowledge in our possession which would enable us, if we chose, if not to stamp out, at least to reduce the mortality from this disease to a very large extent. I cannot believe that this is distinctly understood.
39. Let me, however, make a few comparisons. The number of deaths registered, as I have said, from Phthisis or Consumption in the administrative County in 1903 was 329. The number of deaths registered from Smallpox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Croup, and Typhoid and other continued fevers, was 257. If, however, we add to the numbers dying from consumption of the lungs, those deaths from other tubercular diseases, we must add 148 more, making therefore, a total of deaths in the administrative County from tubercular diseases of 477. This gives us a mortality not only greater than that from all the other infectious diseases taken together, but greater than these plus Diarrhœa, the great scourge of infantile life.
40. Is it a matter of wonder, then, looking at these facts, that one should endeavour to call particular attention to this immensely fatal, but at the same time preventible, disease? When we come to consider what has been done in the County, of course it has to be admitted that the increase of sanitary work does something to mitigate the severity of the disease. The drying of the soil by improved drainage and sewerage, the improvement of house construction, particularly improvement in the ventilation of bedrooms, is work in the right direction; but progress must of necessity be slow.

41. In some districts sanatoria have been erected, where patients may have the benefit, not only of improved treatment and improved surroundings, but, what is in my opinion much more important, may be taught how to prevent themselves becoming centres for the propagation of the disease among their own families and associates. Putting aside the question of the provision of a sanatorium in Warwickshire, however, I am pleased to add that the year under review has not been barren of good work.

42. In the first instance I would chronicle that a card was drawn up by me and largely circulated, which was as follows :—

WARWICKSHIRE COUNTY COUNCIL.

PREVENTION OF CONSUMPTION.

As Spitting is now known to be one of the chief causes of the spread of Consumption, it is particularly requested that persons

WILL NOT SPIT

on Floors of Rooms, Carriages, or other enclosed spaces.

A. BOSTOCK HILL, M.Sc., M.D.,

County Medical Officer of Health.

This I believe from personal observation has done, and is doing, good, and I would ask the aid of the Education Authorities particularly in constantly putting before the eyes of the children the important fact that spitting is not only an offence against manners but an offence against health and life. I believe the hanging up of such a card constantly in every school and class room, so to speak by its importunity in constantly appealing to the eye, will do good in a large majority of instances.

43. In some places, Metropolitan and Provincial, bye-laws have now been passed making spitting a penal offence in rooms, carriages, and enclosed spaces. I think such a bye-law will eventually become general. Its enforcement, however, must largely depend on the education of the people. When the proper time arrives, enlightened public opinion will demand it; till then, I think I would prefer voluntary request, while education progresses.

44. Much good work, too, is being done by the small staff of health visitors in the same direction. A memorandum is handed in to every householder where a case of Consumption is found. This gives information, making, not only for the comfort of the patient, but for the safety of others in the house, and I am pleased to add that in more than a few instances I have received marks of appreciation of the value of the recommendation.

45. In one district in the County, namely in the Borough of Leamington, the voluntary notification of Phthisis has been put into operation, and the Medical Officer of Health thinks that good is resulting. In the three districts for which I am locally responsible, I have adopted the plan of offering disinfection of premises and of all goods and effects free of cost to the householder, when I hear of the death of a patient. I think this is valuable, particularly as in many instances, specially in the poorer classes, houses are changed, and in this way the danger is mitigated to the at present unaffected in-coming tenants.

INFANT MORTALITY.

46. During the year 1,197 deaths were registered in children under one year of age, namely 774 in the Urban and 423 in the Rural districts. These figures, calculated on the number of births registered, give an infantile death-rate of 125 per thousand. The rate for the Urban districts was 138, and that for the Rural 107. The rate for England and Wales was 118. I regret that these figures are not quite so satisfactory as in 1902, when the figure was 116. Still, having regard to the fact that we have a large population engaged in occupations like mining, I am of opinion that the rate is by no means unsatisfactory.

47. Of all the districts in the County, the residential and very healthy district of Erdington appears to be the worst, the figure being 173. In justice to this district I must point out that this large figure is to some extent to be ascribed to the fact that the Aston Union Workhouse is situate here, and that a large number of the deaths in infants occurred among the unfortunates who can claim its shelter. Eliminating the deaths occurring in the Workhouse, the infantile death-rate is only 118, but this figure I consider too high a one for a district so healthy and so admirably equipped as it is.

48. The other Urban districts where the rate was unduly high were Aston Manor with a figure of 159, and Nuneaton and Chilvers Coton with a figure of 151. Both these rates are considerably higher than in the previous year.
49. In the Rural districts, leaving out Coventry, which has a population so small that its figures, even for a year, are fallacious, we only find three districts, namely Foleshill, Tamworth, and Warwick, with rates unduly high.

A SUMMARY OF MATTERS INFLUENCING THE PUBLIC HEALTH, TO WHICH ATTENTION IS DIRECTED IN THE REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH.

50. I am pleased to be able to report that on the whole I have received with great regularity the number of cases of infectious disease notified in each week during the year. These come to hand, as a rule, not later than Tuesday morning, are tabulated in this office, printed, and sent out by post on Tuesday night, and are therefore in the hands of each medical officer of health on the Wednesday morning.

ISOLATION AND HOSPITAL ACCOMMODATION.

51. The provision of suitable hospitals for all the districts in the County has been making progress during the year. The Isolation Hospital Sub-Committee has had several meetings, and although the County is not yet fully provided with efficient hospitals for Smallpox as well as for other diseases, matters have been moving in the right direction.
52. The position of matters at the end of the year is as follows : Solihull and Meriden have combined and have erected, near Hampton, a hospital for Smallpox, which already has been opened and received patients.
53. Rugby Urban, Rugby Rural, Monks Kirby in Warwickshire, and the Crick Rural District in Northamptonshire, combined, and erected a Smallpox hospital for the joint area, which was actually in use during the year.
54. The joint Board, representing Nuneaton Urban, Bulkington Urban, Atherstone, Foleshill and Nuneaton Rural Districts have been endeavouring to acquire a site suitable in position for the wants of the district, and at the end of the year I have reason to believe that matters had moved sufficiently far for them practically to have agreed upon a site. When a hospital has been erected for these districts, practically the whole of the County will be supplied with efficient hospitals for the isolation and treatment of Smallpox, and it is to be hoped, therefore, with Smallpox actually at the gates, if not within the districts, that no time will be lost in erecting and equipping a suitable hospital.
55. An enquiry was held by the County Council at Meriden as to the issuing of an order making Solihull and Meriden into a joint hospital district. It was agreed that negotiations should be opened for the joining of the two districts for hospital purposes as soon as the Yardley district in Worcestershire had erected a hospital of their own, and had dissolved the existing agreement with Solihull. In the meantime, arrangements have been made by Meriden to utilize accommodation afforded by Coventry.
56. In Atherstone, a new site has been acquired for the erection of a fever hospital, while at Nuneaton enlargements have taken place, the equipment has been improved, and arrangements have been made for the reception of patients from Bulkington and the Rural district of Nuneaton.
57. Lastly, a joint committee of the Warwickshire and Northamptonshire County Councils held an enquiry in Rugby in the autumn as to the amalgamation of the Rugby Urban, Rugby Rural, Monks Kirby Rural Districts in Warwickshire, and the Crick Rural District in Northamptonshire, for the purposes of an isolation hospital for diseases other than Smallpox. The Committee made an order, which was to come into force in the early part of 1904. It will thus be seen that as regards isolation generally the County is in a satisfactory position, and there is good reason to hope that before the present year comes to an end the County will be efficiently supplied in this respect.
58. One would have thought it somewhat late in the day to have discussed the usefulness or otherwise of hospitals for the isolation of Scarlet Fever and certain infectious diseases other than Smallpox ; but during the year the matter has been raised, and raised locally, and endeavours have been made to prove that no good results are achieved by the isolation of cases of Scarlet Fever. Such a statement appears

to be opposed not only to common sense but to mathematical possibility, and even if in certain districts such results had been achieved, it would point to the fact of inefficient hospitals or mal-administration of them, rather than to there being anything wrong in the principle of isolation.

59. As an illustration of what I mean, the Medical Officer of Health for the Tamworth Rural District says, "As there is no convalescent block and the patients have to be discharged from the acute wards, there have unfortunately been, in some instances, what are known as 'return cases'"; and, again later on, he calls attention to the fact that there is no observation ward into which a doubtful case may be put temporarily. On the occasion of my visit to the hospital during the year, too, I found a considerably larger number of patients in it than its cubic space warranted. Under these circumstances, then, it is hardly fair to ascribe the alleged failure of isolation to a mistake in principle, when it is due rather to deficiencies of equipment and administration.
60. On the other hand it is pleasing to be able to record opinions expressed by observers as to the value of isolation. The Medical Officer of Health for Alcester says, "The removal of the patients to the hospital is almost invariably effectual in preventing the spread of the disease in the household attacked," and again, "The hospital continues to be invaluable for both the treatment and isolation of infectious diseases, particularly Scarlet Fever."
61. The Medical Officer of Health for Atherstone says, "There were five deaths out of the 190 cases treated at the Hospital, of which at least two were moribund on admission. Seventy-seven cases were treated at home, and 7 deaths occurred out of these 77 cases. The question of the isolation of Scarlet Fever cases in hospitals is at the present time being much discussed, and it has been suggested that a Commission of Experts should be appointed to enquire into the whole subject. I will give my own opinion shortly as viewed from a considerable experience. In every epidemic, except in 1897, as in the recent one, the deaths in hospital have been less in proportion than in the cases treated at home. In 1896, 261 cases of Scarlet Fever occurred, 120 were treated at the hospital and none died; 141 remained at home, 4 died. In 1897, 177 cases of Scarlet Fever occurred, 85 cases were treated at hospital and 2 died; 92 remained at home, none died." This was the exceptional year to which Dr. MEARS previously refers. "In 1901, 246 cases occurred, 146 cases were treated at hospital and 3 died; 100 remained at home and 3 died."
62. My own experience is quite in accord with those just quoted, for it must be borne in mind that many of the cases removed to hospital are of a worse type than those remaining at home, and therefore there is, other things being equal, a greater tendency to fatal results than in the milder cases treated at home.

RIVER POLLUTION.

63. Much attention has been given to this important work during the year, and I am very pleased to be able to state that not only has the condition of the rivers been well maintained, but that a marked improvement can be noted in some instances.
64. I referred last year to the great advance which had been made in the opening of the new bacterial sewage works at Nuneaton. I have on many occasions inspected these works, and analysed samples of the river water before and after the discharge of the effluent, during 1903, and on every occasion I have found the effluent to be good, practically producing no pollution of the river. I also found evidence beyond dispute that since the institution of these works the condition of the river has remarkably improved. I may add that fish have been living for a greater part of the year in the pure effluent from the Works. This I consider a good test of the absence of putrescent matter, and the presence of the full available supply of oxygen.
65. The Works carried on by the Tame and Rea Drainage Board have also progressed, and although the quantity of sewage received from the immense area even during dry weather is stupendous, I am pleased to be able to report a general improvement in the equipment of the Works.
66. The effluent from the City of Coventry too, has on the whole been satisfactory. On one occasion, owing to an accident having occurred in a channel, I found some unpurified sewage running into the river. I called the attention of the authorities to this and it was remedied within a few hours. Since then no complaint has arisen.
67. As a result of my calling your attention to the condition of affairs at Kineton a scheme has been brought forward, not only for the improvement of the sewage works, but for the better sewerage of the town.

68. Steps, too, have been taken at Stratford-on-Avon for the laying down of new sewage works on bacterial lines.
69. At Foleshill, too, plans have been prepared, and an Enquiry was to be held early in 1904.
70. At Bedworth a new scheme has been prepared for the treatment of the sewage on bacterial lines, and for the prevention of the very gross pollution which has so long taken place here.
71. At Hurley, too, an enquiry was held to provide an extra sum for works of sewerage and sewage disposal, while on the very last day of the year an enquiry was held at Brinklow by the L.G.B. *re* the sewage disposal of this village.
72. I also inspected the sewage works of the Borough of Warwick, and examined the effluent produced and its effect on the River, and although, as I reported at the time, the effluent was not quite satisfactory, there was no marked evidence of pollution of the river.
73. In addition to these, further complaints have been made to the Yardley Rural District Council as to the pollution of the River Cole. This pollution has been admitted, and at the time of writing I have received notice that a L.G.B. enquiry is to be held for sanction to a loan of £103,000 for the provision of works for the better treatment of sewage, and the prevention of pollution.
74. I also carefully inspected the River Blythe with a view to discovering, if possible, any pollution of this River, and both as a result of inspection and of analyses of samples of river water, I was unable to find anything that could properly be termed "sewage" pollution taking place.
75. It will thus be seen that a very large amount of excellent work has been carried out, and that as the result of the action of your Council the authorities that in this respect may be termed defaulting are taking vigorous steps to remedy the conditions complained of.
76. There are three cases of serious pollution, however, which up to the end of the year had not been dealt with by the authorities concerned. I refer to the pollution of the stream at Wellesbourne, the pollution of the Anker at Polesworth, and also the pollution occurring in different parts of the Tamworth Rural District. These matters, however, have been under consideration by your Committee, and I have reasonable hope that before long steps will be taken in all instances to remedy the defects.

ELEMENTARY SCHOOLS.

77. From special reports forwarded to the Local Government Board, a copy of which has to be sent to the County Council, I find that a large number of schools have been closed during the year, chiefly due to the prevalence of Measles and Whooping Cough, and more particularly Measles. There can be no doubt whatever that great good at times is done by the closure of schools during epidemic prevalence, but I am of opinion, and in this I am in agreement with the Medical Department of the Local Government Board, that the closing of an elementary school merely because a few cases of infectious disease occur in the neighbourhood, is generally unwarranted.
78. I should like to call special attention too, to what I consider is a most important point, and one to which I have given considerable attention in the districts under my charge, namely the disinfection of schools after their closure. I am of opinion that it should be considered a routine procedure whenever a sanitary authority has advised the closing of the schools for that authority to disinfect the schools before they are re-opened.
79. I find that in many instances it is stated in the reports of the district medical officers of health that certain schools have been closed during the year; but, on referring, I find that no notice of the closure was at the time sent to the County Council.
80. The general order of the Local Government Board of March 23rd, 1891, which defines the duties of medical officers of health, includes the following :—
- “(15). He shall give immediate information to Us of any outbreak of dangerous epidemic disease “within the district, and shall transmit to Us a copy of each annual report and of any special report. He “shall make a special report to Us of the grounds of any advice which he may give to the Sanitary “Authority with a view to their requiring the closure of any school or schools, in pursuance of the Code of “Regulations approved by the Education Department and for the time being in force.”

“(16.) *At the same time that he gives information to Us of outbreak of infectious disease, or transmits to Us a copy of his annual report, he shall give the like information or transmit a copy of such report to the County Council of the County within which his District may be situated.*”

81. I desire, therefore, to call the attention of those medical officers of health in the County who, no doubt in inadvertence, have not, in the past, forwarded the copy of the special reports in which they recommend the closure of schools.

VACCINATION.

82. I am able this year to give a much more complete account of the way vaccination has been carried out in the County. Up to the time of writing I have received reports from all but two districts, and these I hope to receive shortly, and, if not in time for this report while it is going through the press, I shall hope to add them in tabular form in a supplementary report to complete the return.
83. It will be observed that the returns are in two forms, some of them embracing the year 1903, others embracing a period from the 1st July, 1902, to the 30th June, 1903. Some vaccination officers object to furnish returns for the completed year on the quite proper ground that, as the Act does not make vaccination compulsory for four months, many children appear unvaccinated who would appear as having undergone the operation had a reasonable time ensued. In order to meet their difficulties, therefore, I agreed to accept returns for the twelve months ending the 30th June, and in future I hope to be able to obtain returns for a similar period, giving a complete tabular account of the state of Vaccination in the County.
84. In many of the districts excellent work has been done, and is being done. In Erdington and Sutton Coldfield among the Urban Districts, very few cases are to be noted as remaining unvaccinated at the date of the return. In Nuneaton and Bulkington the results do not appear so satisfactory, but it should be observed that in these two cases the return includes the period to the end of the year, and therefore many of the infants may not have reached the age necessary for vaccination. On the whole I consider the results to be satisfactory.
85. Among the Rural districts Foleshill shows very excellent results, not a single case being noted in the column as remaining unvaccinated, although in this case it is to be observed that no less than 79 certificates of conscientious objection to vaccination were issued. The largest total under this head appears at Nuneaton and Chilvers Coton, where no less than 297 certificates of exemption were issued.
86. I have reason to believe that the prevalence of Smallpox has in some instances increased the amount of Vaccination performed, and it is a somewhat melancholy commentary on the common sense of the public that the presence of Smallpox in their midst is necessary for them to endeavour to assure safety by having their children vaccinated.
87. At the present time it almost seems superfluous to call attention to any point in connection with the power of Vaccination to prevent Smallpox, but one point in a L.G.B. report has been clearly shown of late which deserves reproduction. This refers to the effect of compulsory vaccination as carried out in Germany in preventing Smallpox in that country. There every child must be vaccinated before the age of twelve months, and vaccination is compulsory when the child reaches the age of twelve years. Compulsion in Germany is different to compulsion in Great Britain, in that it is real and effective, and consequently practically the whole population of Germany is well vaccinated. The population of Germany exceeds fifty-six millions; that of England and Wales, thirty-two millions. During the past twelve years in Germany there have only been 607 deaths from Smallpox; in England and Wales there have been 6,700, with the smaller population as I have stated.
88. But another important point deserves a moment's thought. In England we are not only content to spend large sums in establishing Vaccination, but we spend also very large sums in the provision of Smallpox hospitals. With all that, as the figures show, we are open to frequent epidemics of Smallpox. In Germany, thanks to compulsory vaccination and re-vaccination, no Smallpox hospitals are required, and indeed do not exist. As a matter of fact, nearly every case of Smallpox in Germany occurs in children under the age at which Vaccination becomes compulsory, or else is imported by immigrants or visitors. If one had not the experience of the past half-century, one would imagine that such figures as these would do something to diminish the opposition, active and passive, to Vaccination; but I am afraid this is hoping for too much.

SCAVENGING.

89. There can be little doubt that at the present time nothing is more conducive to the comfort of the inhabitants of a district than a proper system of scavenging, but far more important still is it to recognise that no one point has probably a more marked influence on health at the present time. It is of importance, therefore, that as sanitation advances the methods of scavenging are improved, and I am pleased therefore, to call attention to two districts in the reports on which special mention is made of the improvement in the methods of scavenging.
90. In the Urban district of Erdington, the Medical Officer of Health says, "I have so often before dwelt upon the absolute importance of removing all filth and dust from premises, in other words, of regular and systematic scavenging, that I need hardly say I consider the greatest advance made in the year has been the improvement in this respect, not only in the more early removal of dust, but in the methods by which this removal has taken place. I have long inveighed against the filthy custom of depositing refuse more or less organic, on the public roads before it is conveyed to the depot to be dealt with. The provision therefore of receptacles which can be emptied into covered carts gives a means of cleansing premises with a minimum of nuisance, and the greatest possible benefit to the public health."
91. In the report of the Medical Officer of Health for the Nuneaton and Chilvers Coton Urban district, he says, "The objectionable practice of depositing refuse from dry ash places on the roadway for removal has been abolished. The refuse is now carried in baskets and emptied direct into carts, and afterwards burnt at the Council's destructor. As regards ashpits and privies, the contents are still deposited on the roadway; the surface of the roadway is thoroughly washed and disinfected after the removal of deposit, by the Council's workmen."
92. The first of these two paragraphs shows in my opinion, a marked advance, and I congratulate the district. I also consider that at the very earliest possible moment the filthy practice of depositing foeces on the roadway, which I know at the present time is so common generally, should be abolished. Much may be done by cleanliness and subsequent disinfection to prevent nuisance and minimise danger, but it is only a palliative treatment, and I am of opinion that one of the most important subjects calling for attention in districts already fairly well equipped, is the improvement of the system by which the middens and ashpits are emptied and cleansed.

PRINTING OF MEDICAL OFFICERS OF HEALTH'S REPORTS.

93. I am pleased to be able to chronicle a further advance in this matter. Last year I reported that only two of the reports of the medical officers of health were sent in in manuscript. This year only one was so sent in, namely that from Farnborough. I have given reasons in the past why it is so eminently desirable for the report of the district medical officer of health to be made as available as possible, in order that a wide-spread interest may take place in so important a matter as the health of the community. I trust therefore, in order to come into line with the other districts in the County, the Farnborough Rural District Council will give orders for the annual report of their Medical Officer of Health to be printed in future.
94. I must again call attention to the delay which occurs in some few instances in publishing the annual reports. In the instructions of the Local Government Board, they say that the report on the district for the previous year should reach them within the first six weeks of the new year, and should not in any case be delayed past three months. In the comparatively small districts within the administrative County area I cannot see any valid reasons for a delay even as long as this, and if, as is sometimes the case, I do not receive a copy of the annual report till early in May, it makes the work of summarising the reports, digesting them, and producing my own annual report, not only one of difficulty, but necessitates a hurry which is not compatible with the proper appreciation and review of the matters therein contained.

INSPECTORS' REPORTS.

95. In the majority of instances these are appended to the reports of the district medical officer of health, and I attach great importance to them being sent in on forms which the County Council supply. As I have before pointed out it is difficult to summarise somewhat complicated tabular forms unless the same basis of tabulation is adopted. In most cases the County Council form is willingly adopted; in others different tabular forms are used, while in one instance at the time of writing I have not received any report from the inspector of the district, though numerous applications have been made. I hope, however, before this leaves the printer's hands to get a return from this district.

BYE-LAWS.

96. Under this heading, there is one case this year to which attention is called to the absence of building bye-laws, namely in the Nuneaton Rural District. The Medical Officer of Health says, "The development of Arley as a colliery centre will entirely alter the character of this part of the District, which so far has been purely rural, and renders the necessity for the adaption of building bye-laws by the Council imperative." With this I quite agree, and while referring to this subject I would call attention to the fact that nothing apparently has been done, judging from the report of the Medical Officer of Health, as regards the putting into operation of building bye-laws in the district of Southam. Last year the Medical Officer of Health advised that the adoption of building bye-laws should receive the earnest consideration of the Council, and he pointed out that no less than 36 new houses had been erected during the year in that district.

WATER SUPPLY.

97. As is right, looking at the importance of the subject, a good deal of attention has been given in most of the districts to the provision of a proper water supply, and no doubt speaking generally, the County as a whole is well off in this respect, the Urban districts particularly so. In some of the smaller Rural districts, surface wells are the chief source of supply. These are apt not only to yield a supply deficient in quantity, but bad in quality, and require constant care and attention.
98. From the report of the Medical Officer of Health, it will be seen that a much improved supply is now available in Atherstone and parts of the Tamworth District, while owing to the fact that the rainfall was far above the average, and wet weather almost continuous throughout the summer, many districts which as a rule suffer from deficient supplies, apparently had little cause of complaint.
99. I am pleased to be able to report that periodic analyses of public supplies are greatly increasing. I have before called attention to this matter, as has also the Local Government Board, on more than one occasion. It is not sufficient to establish a good public water supply, but it is important by inspection and analysis at comparatively frequent intervals to see that the quality of the water supply is maintained. One has only to mention epidemics of Typhoid Fever at Maidstone, Worthing, Kings Lynn, and many other places, to show that unsuspected dangers may suddenly arise, and it is only, therefore, by constant supervision of the water supply that reasonable safety can be found.

BACTERIOLOGICAL EXAMINATIONS.

100. In some districts much interest has been shown in this department of public health work, and many practitioners take advantage of the opportunities they possess of endeavouring to verify the diagnosis they make of cases of suspected Diphtheria and Typhoid Fever. In some districts however, there does not seem to be a proper appreciation in this respect, and I hope that in those districts where little has as yet been done, the District Councils may see their way to ask the co-operation of the medical practitioners in the scheme which, despite certain deficiencies, must be of value to the County as a whole.

HEALTH VISITORS.

101. The most memorable step taken by the County Council to guard public health was undoubtedly the appointment of a health visitor during the year. Miss M. S. Lowe, who was appointed, commenced her duties on September 1st. I decided she should begin in the Nuneaton Urban District. She worked there for three months, while in the last month of the year I transferred her to the Atherstone Rural District.
102. In both these districts she found an ample field for work. She was able to give advice in a very large number of instances as to the proper feeding of infants. I drew up a leaflet explaining in the simplest possible language certain elementary points, as also one to householders on the necessity of keeping their dwellings clean and well ventilated. Copies of these were distributed, as also copies of a leaflet on how to prevent consumption, in houses where consumptive patients were found, and in many instances I have reason to know that the information given has been highly appreciated.
103. The health visitor, too, has been instrumental in finding out defects in property, such as defective drains, leaky roofs, dirty houses, and many other minor defects of which she has given notice to the sanitary inspector of the districts, and I have personal knowledge that much good work has been done in remedying evils of this description.

104. It must not be thought the work of the health visitor trenches in any way on the duties of the sanitary inspector, or indeed any members of his staff. She is not an inspector in any sense of the word. Her functions are rather those of friend of the household to which she gains access, and it is very gratifying to know that although at first there may have been some opposition to her entering a house, this rapidly died away, and in numerous instances she has been asked to return and aid the mothers of families by her help and counsel.
105. I must not pass over the fact that she has found, in several instances, indubitable evidence of systematic neglect of infants and young children. In the first instance she always endeavours to arouse proper parental feelings before taking other steps, but it is only right that I should put on record that in several instances the very best results have followed an intimation to the inspector for the N.S.P.C.C. that his services would be useful.
106. While I have not the least hesitation in affirming that the appointment has been a huge success, I am also intensely struck with the idea of the vastness of the field of labour throughout the administrative County, and the small power to cope with the evils I know to exist. I note with satisfaction that within a few months of Miss Lowe commencing her work the Sanitary Committee were so satisfied with its importance that they at once decided to appoint another health visitor; but this appointment did not take place till after the close of 1903.
107. In this new departure of carrying sanitation into the home I believe we have not only an important, but almost the only means of further improving the health of the people. Sanitary authorities, by providing water supply, drainage and decent houses, have done much. In the future, however, the most important advance will come from an appreciation by the people themselves of the value of good health.
108. I hope I shall not be accused of suffering from too much zeal in this matter, but I do not see how, feeling the importance of the work as I do, I can rest content until all parts of the County have the advantage of the ministration of health visitors. By all means let us hasten slowly, so long as we are content to move at all.

METEOROLOGICAL OBSERVATIONS.

109. It is now generally and fully acknowledged that the public health is generally dependent on meteorological conditions. For instance, dry, hot years are productive of high mortality from Infantile Diarrhoea and sometimes from Typhoid Fever, while in very cold winters the death-rate from diseases of the lungs is certain to be high. In only one of the reports, however, is there a table giving complete readings of barometric pressure, temperature of the air, rainfall, and the number of hours of sunshine. This is to be found in the report for the Borough for Sutton Coldfield, for in that town they have under the supervision of the Borough Surveyor a most excellent observatory, which has existed for some years.
110. In the report for the Nuneaton Urban District there is a table of rainfall given, the instrument being situated at the Sewage Works, while in the report of the Medical Officer of Health for Leamington he says, "At present the Borough has no proper observatory fitted with meteorological instruments. I hope that a site for one will be found before the present year is gone." As Leamington occupies a position in the south of the County, such an observatory would be of great importance, not only in the interests of Leamington itself, but of the County as a whole.
111. I append the observations taken at Sutton Coldfield, according to the table in the Report of the Medical Officer of Health of that Borough, and although this refers only to the northern portion of the County, the results are distinctly interesting. The most important fact in connection with it is the large amount of rainfall. This appears to have been 32.41 inches, compared with 24.9 in the previous year, and is the largest rainfall experienced for a considerable period. At the same time it is interesting in showing that the excess of rainfall over the Central Midlands was not so marked as in certain other parts of the Country. The mean temperature for the year was 47.9° compared with 46.2° in the previous year, while the amount of sunshine was 1,266 hours, compared with 1,262 in 1902.
112. Though one's recollections of the summer would lead one to believe that it was almost, if not quite, the most wretched recorded within memory, the figures do not quite bear this out. It is true that May was very deficient in sunshine, but August and September were, in this respect, better than in the preceding year. The largest amount of rain fell in the month of October, when 5½ inches fell, compared with 2.3 in the previous year.

113. The effect of these conditions on the public health is very evident. It is a curious, but at the same time perhaps not altogether pleasant, fact to remember that a year in which there is no great excess of heat and cold, and which may be termed a "wet year," is always a healthy one. The old do not die in winter, nor the young in summer, due to the fact that those septic conditions which depend on high temperature of air and soil are not found, while the washing of the air and ground has also an important effect in preventing the outbreak of Diarrhœal disease.

SPECIAL DEATH RATES.

114. As in former years, I give herewith a summary of the death rates in the County from the three principal Zymotic diseases, namely, Scarlet Fever, Typhoid Fever and Diphtheria. The following are the figures for the fifteen years in which I have summarised the reports of the District Medical Officers of Health :

	Typhoid Fever.	Diphtheria.	Scarlet Fever.
1889.	0·12	0·12	0·10
1890.	0·07	0·07	0·13
1891.	0·13	0·08	0·20
1892.	0·10	0·08	0·07
1893.	0·19	0·12	0·05
1894.	0·05	0·08	0·05
1895.	0·06	0·19	0·09
1896.	0·11	0·25	0·18
1897.	0·09	0·11	0·12
1898.	0·13	0·10	0·07
1899.	0·25	0·15	0·08
1900.	0·22	0·14	0·04
1901.	0·13	0·16	0·11
1902.	0·09	0·12	0·15
1903.	0·04	0·11	0·12

115. Last year I said, "It is very gratifying to observe that there has been such a remarkable diminution in the death-rate from Typhoid Fever." Much more, then, can I record with satisfaction the fact that during the year under review the rate has fallen, on that low limit, upwards of 100%, and the figure shown for 1903 is the lowest of which I have any record.

116. In Diphtheria we have a lower rate than any since 1898, and almost as low as any recorded, while in Scarlet Fever we have a rate lower than in 1902, though not so low as in the year or two preceding that. I have already pointed out that too much importance must not be attached to the rate for any particular year of Scarlet Fever. It is a disease coming fairly regularly in large areas every fourth or fifth year, and therefore when it assumes its epidemic character, it is certain that a higher mortality will be shown.

CONCLUSION.

117. Everyone will, I think, agree that there is in the reports summarised here a record of sanitary advance. I have commented, under the various heads, on the improvement shown, and the measures which I think it desirable to take, and I need do no further now than to tender my thanks to the District Medical Officers of Health and the Sanitary Inspectors for the help which I have received from them on all occasions. I have invariably been received courteously, and as we are all working for the same end, I trust that these pleasant relations will long continue.

I have the honour to remain,

My Lords and Gentlemen,

Your obedient servant,

A. BOSTOCK HILL, M.Sc., M.D., D.P.H.,

County Medical Officer of Health.

SUMMARIES OF ANNUAL REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH.

U R B A N D I S T R I C T S.

ASTON MANOR.

118. This is the first report that Mr. MAY has presented since the District of Aston Manor was incorporated. He says, "I am pleased to be able to congratulate the Corporation on the continued low death-rate and the good health of the town. The death-rate for the year under review was 14·8, and (although calculated for the first time on the gross deaths belonging to the Borough, whether registered therein or not) it is 1·2 below the average of the previous ten years. This lessened death-rate was partly due to the low mortality from Infantile Diarrhœa, but the improved sanitary condition of the town and the diminished number of privies and middens have no doubt borne some share in reducing the general, and particularly Zymotic mortality. Several cases of Smallpox occurred during the early part of the year; the last case was reported at the beginning of May, and no further outbreak occurred. Diphtheria and Membranous Croup have also shown diminution. Scarlet Fever, always endemic in the district, has continued as prevalent as in the preceding years, though towards the end of the year it decreased markedly. Typhoid Fever has not increased its hold upon the district, and has proved less fatal."
119. Mr. MAY refers to the fact that unless great care be taken the population of the town is likely to be over-estimated, for, as it is now built over its entire area, the average rate of increase of past years cannot be maintained. He further points out that the average number of persons per inhabited house shows a decrease on the last two censuses, and he says, "I consider this fact, together with the impossibility of many more new houses being erected, and the continued diminishing birth-rate, indicative of the population of Aston Manor becoming stationary."
120. Referring to the Births, Mr. MAY shows that the birth-rate was 28·7 per thousand, or 4·1 below the average for the previous ten years, and 0·3 above the average for England and Wales for 1902. It is the lowest that has ever been recorded, and he shows a chart indicating that it has fallen from 44 in 1874 to 28·7 in the year under review, and, what is more, the chart shows graphically that the fall was a continuous one till 1890, then more or less intermittent till 1897, while it has continually fallen since.
121. Referring to this, Mr. MAY says, "The birth-rate is some index to the growth and prosperity of a town, and I fear its decline in Aston Manor is not altogether accounted for by the impossibility of the ingress of young people of child-bearing age into the district (owing to the provision of more house accommodation being so restricted, as already explained), and the consequent gradual alteration of the age distribution of the population, but it is also referable to other causes beyond control, such as the lessened number of marriages, and the effect of education in fostering an inclination in many to restrict their families. This latter desire is attributable in some to mere selfishness, and in others to the fear that in the keen competition of life they will not be able to maintain and bring up a large family to the standard they would wish."
122. Referring to Infant Mortality, Mr. MAY shows that with the exception of 1902 the number of deaths was the lowest since 1884. The rate is 159. This, though satisfactory compared with previous years, is undoubtedly very high, and was due to Diarrhœal diseases, while ten per cent. of the children were prematurely born.
123. Referring to Infectious Disease, Mr. MAY shows that 606 cases were notified by medical men during the year, this being 25 in excess of 1902. Of these cases 31 were Smallpox, 383 Scarlet Fever, 77 Typhoid Fever, and 44 Diphtheria. In addition to the fumigation of houses and the disinfection of bedding and clothing, 522 notices were sent to head teachers acquainting them of infectious disease among school children.
124. Measles was fatal to about the average extent, 25 deaths being registered as due to it, compared with 24 and 29 in the two previous years. Diphtheria and Membranous Croup were altogether responsible for 52 cases, the lowest number recorded during the past ten years. This is highly satisfactory. Seven of these cases proved fatal. Mr. MAY says, "The prevalence of this disease has steadily declined since the epidemic of 1896, which speaks well for the district generally, and I trust in time it will be still further reduced."

125. Referring to the bacteriological diagnosis of Diphtheria under the County Council scheme, Mr. MAY says, "Only 14 specimens of secretions from the throats of persons resident in Aston Manor, and suspected to be suffering from Diphtheria, were sent by the various medical men attending them to the Bacteriological Department of the Birmingham University for examination, five of which proved 'positive.'"
126. Scarlet Fever, as I before noted, has been more prevalent in the Borough, and the number of cases notified exceeds that of the previous year. There were 383 cases, of which 19 died. Mr. MAY says, "It will be seen from the number of deaths that the severity of type mentioned in my previous reports has continued, the case mortality for the year being five per cent."
127. Mr. MAY points out that the greatest incidence was in Tower Ward, where 67 cases occurred, 25 of them during May, June and July, 13 of the 25 being in Tower Road. Referring to this, he says, "I found that the children from the houses affected had been freely playing together, and there was little doubt that this and the 'neighbouring' which takes place among the mothers in such a locality helped to convey infection. All these 25 cases were removed to hospital, and no further case connected with this group occurred after the end of July. During the month of September, however, the ward was again particularly affected by reason of nine cases occurring in seven houses in Clifton road. Three of these cases occurred in that end of the road nearest Potter's Hill, and did not appear to be connected with the remaining six cases, which occurred in four houses at the other end of the road in close proximity one to another. I visited the infected houses and took what measures I could to prevent the spread of the disease."
128. Referring to Smallpox, Mr. MAY says, "The outbreak of Smallpox which commenced in Aston Manor in December, 1902, continued during the early part of 1903, the number of cases notified during that year being 31. With four exceptions the outbreaks were limited to the first case in the house, which must be attributed to prompt removal to hospital and to the fact that in most cases the other occupants of the house submitted to re-vaccination. The first of the four houses in which more than one case occurred was in Reservoir Ward, a child (unvaccinated) being taken ill on January 11th, and her father being taken ill a fortnight later. He was, however, away from the town when the first case occurred, and it may have been that by a coincidence he contracted Smallpox elsewhere. In another house in Brook Ward a mother and two children (the two latter unvaccinated) were notified on the same day, being connected with a case in Birmingham. Two more cases occurred in a house in Park Ward, a member of the household having worked at a factory in Birmingham where there had been cases of smallpox. The remaining house in which more than one case occurred was in Six Ways Ward, five persons being reported as suffering from the disease in four days. In a large majority of the outbreaks which occurred in the Borough, a probable source of infection could be traced, or a connection with another case established. For instance, there was a further case in a court in Brook Ward in which the three cases above referred to occurred, while in several instances I ascertained that cases of Smallpox had occurred in the factories at which the patients worked. All the cases were removed to hospital, each house being visited by your Medical Officer of Health. I also diagnosed several doubtful cases at the request of the medical practitioners attending them. Re-vaccination of all "contacts" in the houses and elsewhere was performed wherever they were willing; and the Vaccination Officer was informed of each case as it occurred. Employers of the patients working in factories were written to, recommending re-vaccination of all employees who had been in contact, and several factories in the district enforced the re-vaccination of their workpeople, which no doubt limited the spread of this disease to a great extent. I stated in my last annual report that I had written to the Clerk of the Aston Board of Guardians, after consultation with the Chairman of the Health Committee (Alderman Alfred Taylor, J.P.), recommending the re-opening of a public vaccination station, and this was opened at Burlington Hall on January 10, and remained open till June 27, 1903. To the widespread facilities for vaccination and the prompt re-vaccination of contacts, together with the immediate isolation of cases in hospital, is to be attributed, I believe, the curtailment of the outbreak in Aston Manor."
129. Referring to Puerperal Fever, Mr. MAY records that four cases occurred during the year, one of them proving fatal. He further refers to this matter in connection with the Midwives Act, 1902, and says, "Part of the Midwives' Act, 1902, on which I reported with some detail in my last annual report, has now come into operation, and is being administered, as far as Aston Manor is concerned, by the County Council. When the Act is in full operation the abolition of the incompetent "midwife," which it is intended to effect, and the supervision which it authorises over the training and practice of midwives, should lead to a reduction of the number of cases of, and the mortality from, Puerperal Fever."

130. Referring to Consumption, Mr. MAY says, "I regret to have to report that the decrease in the number of deaths from Phthisis in the district referred to in my last annual report has not been maintained, and that during the year 108 deaths were registered from it (including 10 registered outside the district), as compared with 62 in 1902 and 88 in 1901. The latter figures, however, represent the deaths registered in Aston Manor only. The mean annual death-rate for Phthisis for Aston Manor during 1903 is 1·3, as compared with 1·2 for England and Wales for 1902. Several applications have been made to me for the disinfection of bedding, etc., after death from this disease, and I have recommended it, and your Disinfection Department has always been willing to comply with my request."
131. Diarrhoea among children was very fatal during the year, no less than 102 deaths being set down to it.
132. Much attention appears to have been given to the incidence of Typhoid Fever in the Borough, the number of cases being practically identical with that of 1902, namely 77, which, though high compared with the County as a whole, is less than in any year since 1895 in Aston. Mr. MAY records that though the cases have been almost as numerous, the type has been much milder, and the mortality, therefore, less. Referring to this, he says, "The continued decreased prevalence of Typhoid Fever in Aston Manor is a pleasing feature of the year's record, and can to some extent be attributed to the greatly improved sanitary condition of the district, and particularly to the important work of substituting w.c.'s and dry ashpits for old-fashioned privies and middens, which has been so well carried out here for several years past. Privies and middens under any circumstances must necessarily be offensive and unhealthy, and where they become the receptacles for the discharges from a typhoid patient they are in several ways likely to cause the spread of infection in the immediate locality. Their conversion into water-closets, by doing away with deposits of faecal matter and refuse, and by rendering it possible for discharges to be flushed straightway into the sewers instead of lying in foul middens for days and weeks together, is bound to have its good effect in helping to reduce the prevalence of a disease which is so closely associated with filthy and unwholesome surroundings."
133. Mr. MAY calls attention to the fact that he received information from the Medical Officer of Health of the City of London that a certain number of Army blankets had been consigned to St. Joseph's Home, Brougham Street, being part of a large number of returned army blankets from South Africa, some of which had been proved to be infected with Typhoid bacilli. Twenty-four blankets were discovered by the Sanitary Authorities, and, as they had been in use for three months and no case of Typhoid had occurred, there seemed little danger of their being infected. Still, the whole of them were removed to the disinfecting station, disinfected separately, as were also the beds and bed clothing from the dormitory in which they were found, this latter being fumigated.
134. Mr. MAY records that no less than 8,626 articles were disinfected in the steam disinfector, of which nearly 7,000 came from Aston Manor, the remainder being made up by articles from the other districts which by arrangement use this apparatus.
135. Referring to the sanitary state of the District, Mr. MAY says that a large amount of general sanitary work has been carried out during the year. Three thousand two hundred and thirty-three preliminary notices were served to abate nuisance, a large number of these being for opening, cleansing, or repairing defective drains and w.c.'s, and for filthy and dilapidated premises.
136. Mr. MAY refers with pleasure to the fact that a large number of water closets have been either erected or substituted for older and less sanitary conveniences; no less than 587 were substituted, while 119 new ones were erected. Parts of the Borough, namely Park Street, Lynton Road, Sandy Lane, Vine Street, and Thimble Mill Lane, were subjected to systematic house-to-house visitation, with the result that many nuisances were discovered and remedied.
137. Particulars are given of the work done under the Factories and Workshops Act, 1901, and Mr. MAY shows that 101 workshops were on the register at the close of the year, exclusive of bakehouses. As a result of the systematic visitation to which these were subjected, no less than 27 notices were served for remedying defects other than absence of cleanliness.
138. Referring to Slaughter-houses, Mr. MAY says, "The number of private slaughter-houses in the Borough is 29, being one less than last year, owing to a slaughter-house that had become vacant being expunged from the register. These slaughter-houses are regularly inspected to see that the bye-laws are complied with, and to secure, as far as possible, the wholesome character of the meat; but situated as many of them

are in thickly-populated neighbourhoods and in the midst of small dwellings, some degree of annoyance and discomfort to the surrounding inhabitants is inevitable, and the provision of a public slaughter-house or abattoir for the town would be a distinct advantage, by encouraging the disuse of these private slaughter-houses, and by rendering practicable a closer supervision over the meat prepared for sale."

139. Mr. MAY points out that the House Accommodation in the Borough is, generally speaking, sufficient. Over-crowding, therefore, is not a serious nuisance in this District, and only five cases were brought under his notice during the year. The nuisances were abated without further proceedings.

140. The sewage of Aston Manor is, of course, treated at the Works of the Tame and Rea Drainage Board, Aston being one of the constituent districts. Mr. MAY, however, encloses a Report from the Borough Surveyor, Mr. G. H. JACK, on the sewers of the Borough. He says, "During the past year a close inspection of certain sewers and drains (the condition of which has been doubtful) has been in operation, with the result that some of the older brick sewers have been laid bare, and in some cases (as in New Street) steps taken with a view to re-construction; and further, the vexed question of providing a separate system of storm water sewers has engaged the attention of your Surveyor's Department for the last two years, and during the year just past part of the larger works contemplated have been taken in hand and constructed, particularly the large outfall culvert between Nelson Road and the River Tame, which is 6ft. 6in. by 3ft. 7in. in its lower lengths and 3ft. circular in the upper portions.

"These works will effectually prevent a recurrence of the very serious flooding which has been experienced for some years past in the neighbourhood of Trinity and Witton Roads. The main culvert has a capacity of 4,000,000 gallons per hour, which is equal to $\frac{3}{4}$ -in. of rainfall per hour for the whole area draining towards the River Tame at Witton. Other works of a similar character have been designed and will immediately proceed in connection with the area draining towards the Hockley Brook at Aston Cross.

"The work of culverting the obnoxious Mansfield Road Brook course has been accomplished during the year, which removes an insanitary state of affairs at the rear of houses in Chain Walk, Mansfield Road, and Witton Road. The whole of the open portions of the brook course have now been properly culverted.

"The importance of executing works of this kind in a district like Aston Manor cannot be over-estimated, when it is considered that practically the whole area is built upon."

141. The Report concludes with an account of the accommodation for hospital isolation of Smallpox and Scarlet Fever. In connection with this, two important points are to be noted; one that a small pure ward has recently been established in which to place patients in special cases for a period before finally discharging them, thus lessening the possibility of return cases where a child has to go home to mix at once with the remainder of a young susceptible family; the other that the hospitals of Aston Manor were freed to all residents of the Borough. Prior to this, a system of a small weekly contribution towards the maintenance of each patient, as far as their means would allow, had been in vogue. I called attention to this arrangement many years ago, and I am particularly pleased to see that the views I then expressed have now been acted upon.

142. I can congratulate heartily the sanitary staff of this district on the excellent results achieved, for not only has it the largest population of any district in the County, but it has the smallest area, and consequently there is greater over-crowding on space than in any other district, with all the concomitant difficulties which this entails in the preservation of the general health of the populace. The results, therefore, in my opinion, are highly satisfactory.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
79,417	28·7	14·8	2·3	159

BULKINGTON.

143. Mr. PEACOCK reports a death-rate 3 per thousand lower than in the preceding year. He records that only twelve cases, including Scarlet Fever 5, and Diphtheria 1, were notified. The case of Diphtheria alone proved fatal, giving, therefore, a much lower Zymotic death-rate than in 1902.

144. He reports that the factories and workshops and outworkers' houses in the District have been visited with a view to their sanitary condition, and have been found satisfactory.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,582	28·4	14·5	0·63	133

ERDINGTON.

145. Dr. BOSTOCK HILL is again able to shew a singularly good record for this District. He reports that the birth-rate is above the average, and higher than in any of the last ten years, with the exception of 1900 and 1901. The death-rate is perfectly satisfactory, for, although not the lowest ever recorded, it is far below the average of the country, and down to a figure as low as it is possible to maintain it for a period of years. The Zymotic death-rate was also quite satisfactory, being below the average of the past five years.
146. He refers, however, to the question of Infant Mortality, and says, "In my reports for the last year or two I have been able to record a decreasing infantile death-rate, and I much regret that in 1903 the one black spot on our records has been the higher rate of infantile mortality. The percentage of deaths of infants under one year to the registered births has risen from 9·27 to 17·3, or to put it in a way which is more usual, out of every thousand births, 173 would have died before reaching the age of twelve months."
147. He points out that this mortality is largely caused by a number of the children born in the Workhouse dying at a very early age, and shows that if the births and deaths in the Workhouse are eliminated, the figure would only be 118 per thousand. He gives the cause of every infantile death, and further says, "On looking through these causes of death, it is somewhat saddening to find that the two chief causes are respectively Premature Birth and Syphilis, indeed, more than one-fourth of the mortality was due to these two causes. Another fourth was due to Inanition, Marasmus, and Debility from Birth. A certain amount of satisfaction, however, may be felt in that the deaths from infectious disease were comparatively few, namely twelve, including Diarrhœa, of which six cases proved fatal. Measles was somewhat prevalent, though hardly ever seriously epidemic, and three deaths in infants were registered from it; but, unhappily, one is compelled to come to the conclusion that the bulk of this infant mortality is due to causes very largely outside the scope of sanitary effort, but probably well within the scope of private effort, particularly that devoted to the spread of hygienic knowledge among the lower classes of the people."
148. Referring to Zymotic Disease, he shows that the number of cases was rather less than in the preceding year. Smallpox was unhappily introduced into the District, twenty cases altogether being reported, but of these seventeen were in the Workhouse, so that only three occurred in the District proper. He gives in detail an account of the various outbreaks, and points out the work done, particularly in connection with the cases at the Workhouse, to prevent its spread. As regards Scarlet Fever, he reports 52 cases with only one death, and says, "Considering the marked prevalence of the disease in and around the Midlands, I think the number of cases occurring must be considered quite satisfactory."
149. The only Zymotic disease at all troublesome was Diphtheria. Thirty cases of it were notified, and seven proved fatal. He says, "Nearly all the cases were sporadic. Some occurred in each quarter of the year, the largest number, however, being in the first quarter, when thirteen were reported. I visited all the cases, and in some few instances found marked sanitary defects in and around the premises. In the majority of cases, however, nothing insanitary could be detected. The milk supply, in my opinion, was not proved to be at fault, nor was school attendance a marked factor in the causation of the cases. As I have so often noticed before, a large number of the cases were said by their mothers to be weakly children, very often stated to be weakly from birth, and in one or two instances where large families were found in small houses, and where isolation was more or less incomplete, no spread of the disease was observed from the first case."
150. In regard to Typhoid Fever, it is pointed out that seven cases were notified in the District proper, compared with eight in the previous year. Nothing, however, was remarkable in any instance, except that three were undoubtedly associated with the consumption of oysters or other shell-fish. He says, "One case is particularly interesting, as it was an undoubted case, occurring in a man who had recently been operated on for Appendicitis. During his convalescence he was advised to take oysters. He did so, and within the period of incubation, suffered from well-marked Typhoid. Another case, that of a woman, became infected a fortnight after having eaten oysters; while in the case of another man I discovered that he had been eating mussels on many occasions just previous to the incubation period of the disease."
151. In regard to matters of general routine sanitary work, he refers to the importance of the inspection of new buildings, and the regular inspection of drains in the older ones. He also congratulates the District on the improvement of scavenging, whereby practically a weekly removal of all household refuse takes place.

152. In conclusion he says, "A perusal of this report will convince anyone that, if the Death-rate has not been the lowest recorded, yet in a sanitary sense much progress has been made in the District. I have been associated with it now for the long period of twenty years, and I can with confidence say that in practically every case all suggestions of mine have been carried out, and I believe that the District will compare favourably with any others in the Kingdom."

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
18,724	25.79	11.10	1.17	173

KENILWORTH.

153. Dr. WILSON reports a death-rate $1\frac{1}{2}$ per thousand higher than in the preceding year, but still refers to it as a comparatively low annual one.
154. The total number of cases of infectious disease was 59, compared with 53 in the preceding year, and included 36 cases of Scarlet Fever, 3 of Diphtheria, and 2 of Enteric Fever. The total number of deaths attributed to the seven principal Zymotic diseases was 5. Referring to the cases of Diphtheria, one was imported, and this and another were removed to the isolation hospital. The two cases of Enteric Fever occurred in one family, and were associated with polluted well water. The well was closed, the drainage and sanitary appliances re-modelled, and town water laid on.
155. As regards works of a public nature, Dr. WILSON reports that the sewers have been kept well flushed, and public scavenging, on the whole, well attended to.
156. He refers to the new sewage works which it is proposed to establish in the place of the present inefficient one, and says, "It is to be hoped that the plans will soon be submitted to the Local Government Board in order that a public inquiry may be held, and the works carried out without further delay."
157. Details are given of the work done under the provisions of the Factories and Workshops Act.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
4,630	21.6	14.2	1.08	80

LEAMINGTON

158. Dr. BROWNE reports a general death-rate higher than in the two previous years; the Zymotic death-rate however, was lower than in the previous year, and indeed was very low, being only 0.25 per thousand, the average for the ten previous years being 0.40. It will be seen therefore, that as regards the mortality from Zymotic disease the District has been particularly healthy.
159. The Infant Mortality rate is much lower than in the previous year, and for a town of the size of Leamington may be considered, in 1903, fairly satisfactory. Referring to this, Dr. BROWNE says, "I must repeat what I have said in previous reports touching the ignorance of the working-class mothers as to food suitable for infancy, as to cookery, as to seasonable clothing in infancy, as to personal cleanliness and house ventilation. All these points bear upon disease and mortality, and I would much like to see instruction in these matters insisted upon in our educational system, and I have no doubt that a lowering of the death-rate under five years of age would result." Out of the 85 deaths which occurred in children under five years of age, 27 are said to have been insured.
160. Referring to Smallpox, Dr. BROWNE records that one case, in a family domestic, was reported in South-east Ward in April. At that time this disease was prevalent in Coventry, and the girl had visited there, and was taken ill on the 12th day after her return. Dr. BROWNE says, "Immediate steps for her removal to hospital, for disinfection, for vaccination and quarantine of all 'contacts' were taken, with happiest results."
161. It appears also, that there was a possibility of the disease being again introduced in the autumn, as it was found that several ladies and gentlemen had been in possible contact with a case which occurred afterwards at Scarborough. Luckily, however, no spread took place.
162. Chickenpox appears to have been somewhat prevalent, the large number of 200 cases being notified. As regards Typhoid Fever, only two cases were reported, and both of these were imported from a distance.

163. In reference to the possibly infected blankets from South Africa, Dr. BROWNE records that information was received that some had reached Leamington. The Inspectors therefore made a tour of the drapers' and upholsterers' warehouses and public institutions, and finally found a consignment in one warehouse. These blankets were taken away for disinfection, and no evil results therefore followed.
164. Diphtheria of a mild type was somewhat prevalent, twelve cases being notified, of which one, however, proved fatal. Sanitary defects were found in six instances.
165. An important and interesting fact in the report is the statement that Pulmonary Tuberculosis, or Phthisis, has been made voluntarily notifiable in the Borough. Dr. BROWNE says, "The disease is better under control, and we now know of all new cases, and in case of death our system of disinfection of premises, clothing, bedding, &c., exercises some influence in limiting the spread of infection. I think it advisable to continue voluntary notification; the advantages are palpable and the cost trifling. In eleven cases Bacteriological examination was made, and showed the characteristic bacilli in five only. By some large cities in England this disease has been made compulsorily notifiable. Such a step is not necessary just yet in Leamington. The voluntary method fulfils all the requirements of the town. I would ask all my medical brethren to aid me in notifying every possible case, to have the same verified at Birmingham University, and to call upon our Health Department to disinfect premises after death. I would also like to hear of the removal of any case to any other town. The printed notices as to spitting in public places of resort and public conveyances do not seem to have successfully caught the attention of the people in general, and, as I before remarked in my last report, spitting will continue in public conveyances and places of resort until, as in many countries, the act is made penal."
166. Referring to Water Supply, Dr. BROWNE shows that the daily consumption per head is 22·21 gallons, and that periodic analyses of the water have been satisfactory. He reports, also, that a refuse destructor is in full working order, and has destroyed 650 tons of refuse per month. Sewer flushing has been regularly carried out, nearly eight millions of gallons of water having been used during the year, and it would appear that complaints of street smells are now rare.
167. Dr. BROWNE says, "I must continue to deplore that we do not possess a public abattoir. Though we now and then catch and punish an offender for the sale of unsound meat, I am certain that large quantities of such meat must of necessity escape the notice of the authorities."
168. A Table of some Meteorological observations is given, taken by the Borough Surveyor and the Manager of the Gas Works. Dr. BROWNE says, "At present the Borough has no proper Observatory fitted with meteorological instruments. I hope that a site for one will be found before this present year is gone."

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
27,017	18·02	14·6	0·25	125

NUNEATON AND CHILVERS COTON.

169. Mr. PEACOCK reports an identical death-rate with that of the previous year, though the rate of infant mortality is somewhat higher. He says, "The infantile deaths were chiefly due to wasting diseases, Premature Birth, and Bronchitis."
170. Referring to infectious disease, he records at some length the proceedings taken to cope with the cases of smallpox which occurred during the year. Of these there were twelve, and they were all removed and treated at the Council's temporary Smallpox hospital at Tuttle Hill. Of these, seven were mild in type, and the other five were confluent. He says, "Speaking generally, it was found that in all the mild cases, vaccination in infancy had been practiced with beneficial results. In most of the confluent cases either the patients had not been vaccinated at all, or the operation had not been carried out in an effectual manner; one mark, in two of the cases, was all to be seen. One of the latter, a man of seventy, with only one mark, proved a very bad case."
171. He further says, "Efficient vaccination, re-vaccination, and complete and early isolation are and have proved invaluable in dealing effectually with this Zymotic."
172. Scarlet Fever was not very prevalent, only 96 cases being reported. There were only 8 cases of Typhoid Fever, compared with 11 and 77 in the two preceding years. Of these eight cases, two proved fatal, showing that the type was somewhat severe.

173. Referring to isolation hospital accommodation, Mr. PEACOCK refers to the importance of acquiring at once a proper Smallpox hospital, and suggests that a site which has been selected as suitable for the joint area of the Nuneaton Urban and Rural, Bulkington Urban, and Foleshill and Atherstone districts, be acquired as early as possible, and that an up-to-date and efficient hospital be erected. He also refers to the many changes and improvements which have taken place in the Scarlet Fever hospital, and says, "A new hospital, capable of accommodating twenty more patients, has been erected, and is now ready for use, and with the two (the old and new) hospitals, there is now accommodation for thirty-four patients."

174. He also records that definite arrangements have been concluded by means of which patients are received from the Bulkington Urban and the Nuneaton Rural Districts.

175. Referring to scavenging and the removal of ash-pit refuse, Mr. PEACOCK says, "The objectionable practice of depositing refuse from dry ash places on the roadway for removal, has been abolished. The refuse is now carried in baskets and emptied into carts, and afterwards burnt at the Council's destructor. As regards ash-pits and privies, the contents are still deposited on the roadway; the surface of the roadway is thoroughly washed and disinfected after the removal of deposit by the Council's workmen."

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
27,182	34·8	13·8	1·03	151

RUGBY.

176. For the third year in succession Dr. WILSON is able to record a low death-rate in this District, the one for the year 1903 being the lowest of the three. The Zymotic death-rate is also low, as is also the rate of infant mortality. Though the Zymotic death-rate, however, was exceedingly low, the number of cases of infectious disease notified was considerably above the average, due to the occurrence of very mild cases of Scarlet Fever.

177. Altogether, 9 cases of Smallpox, 29 of Diphtheria, 208 of Scarlet Fever, and 2 of Puerperal Fever were notified. Referring to Smallpox, Dr. WILSON says, "Of the 9 cases of Smallpox, 1 occurred in the Union Workhouse, and as the patient was promptly removed to the new Smallpox hospital on Lawford Heath, and all other precautions taken, there was no further spread. The other cases, as fully reported at the time, namely, in April, were all traceable to a man who had stayed as a visitor for a single night in a house in West Street, and who, on his return to North Wales next day, was reported to be suffering from the disease by the Medical Officer of Health of Carnarvonshire. Disinfection was at once carried out, and re-vaccination of the members of the household strongly urged, but this was unfortunately declined. The wife of the occupier, however, contracted the infection from this man, and she, in her turn, infected a son, two daughters, a grandchild, a next-door neighbour, who had been waiting on her, and one of her children. It was found that three grandchildren and the two children of the next-door neighbour had never been vaccinated, and it was only under very great persuasive pressure that consent was obtained to have them vaccinated, but with the fortunate result that though all the children were promptly removed to the hospital along with their mothers and the other cases, because they had already been exposed to the infection, two of them escaped altogether, and the others had the disease in a very mild and modified form. The other persons who had been in contact with the cases were kept under observation for a fortnight, re-vaccination and other precautionary measures carried out, and the outbreak, which might have assumed serious dimensions, was speedily stamped out. It was exceedingly fortunate, too, that the new Smallpox Hospital was practically finished, and a caretaker and his wife were appointed just before the first case was notified from the Workhouse. In my report when the outbreak took place, I directed special attention to the large number of unvaccinated children which I had reason to believe existed in the town, but, as I have frequently dilated on this subject in previous reports, I need only repeat my conviction that unless vaccination and re-vaccination are properly carried out, there is always great danger of the disease spreading when it is once introduced into any community in spite of the costly protection afforded by hospital isolation."

178. Referring to Diphtheria, Dr. WILSON reports that the cases were mostly of a mild type, and that the majority were spread through attendance at school, though some were associated with sanitary defects, which were remedied.

179. Scarlet Fever was also said to be very mild in type, and was also traceable to attendance at school. A very satisfactory feature of the report is that not a single case of Typhoid Fever was notified during the year, and that there were only four deaths from Diarrhoea.
180. Building appears to have been active, as 195 houses were completed and certified as fit for habitation, and 99 others were in course of erection at the close of the year. New building bye-laws, approved by the Local Government Board also came into force.
181. Attention was given to the water supply, and two miles of water mains were laid; the new reservoir at Brownover Mill was also completed in the early part of the year. An underground lavatory was also completed in the Market Place.
182. The Report states that the sewers were well flushed, and that continued attention was given to adequate ventilation, while scavenging, on the whole, was well attended to.
183. Attention is called to the fact of the importance of the erection of a destructor for the disposal of refuse. Five of the new slaughter-houses erected by the Council have been rented during the year.
184. The Report also states that the provisions of the Factories and Workshops Act have been duly carried out, and, where necessary, notices have been issued.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
18,220	23·1	10·3	0·54	87

STRATFORD-ON-AVON.

185. Dr. THOMSON reports that the low death-rate of 1902 has not been maintained during the year under review, but that it has risen to 16·2, which is about the average. The birth-rate shows a slight falling-off, while the rate of Infant Mortality has risen to 139 per thousand births. Speaking of this, Dr. THOMSON says, "I do not think a country town like Stratford should have a mortality of more than 100 per 1,000, and if infants had nothing but breast-milk or clean cows' milk and barley water out of clean bottles until their first dentition, they would do better among the poor. It is satisfactory to note that infantile deaths are rarely certified in the town as due to Diarrhoea, for infantile diarrhoea is often co-existent with defective sanitation of the premises occupied."
186. Referring to Infectious Disease, Dr. THOMSON records two cases of Smallpox, both notified from the Union Workhouse. They were both tramps who arrived with the disease on them. In reference to this Dr. THOMSON says, "The sanitarians of the twenty-first century will look back with amazement on their ancestors who inflicted fines for moving pigs out of areas infected with swine fever, but allowed a tribe of tramps to wander about at large spreading Smallpox."
187. Scarlet Fever was prevalent throughout the year. All the cases notified were sent at once to hospital. There was no case of Diphtheria or Typhoid Fever.
188. Referring to School Closure, from Scarlet Fever, Dr. THOMSON says, "I am not of the opinion that the results to be obtained by closing a large school like the National Schools, because a few children develop Scarlet Fever every month, justify the grave interference with school work which follows." With this, I heartily agree.
189. Dr. THOMSON refers to the subject of the housing of the working classes and says that a partial solution of the question of adequate housing in the Borough lies in the fact that while the population has not increased in the decade 1891-1901 the number of newly-erected houses has been much in excess of those pulled down during the same period.
190. As regards Water Supply, Dr. THOMSON reports that the wells of the town are being superseded by the supply from the mains. During the year, 23 new connections, embracing 33 separate supplies, have been made, making a total of 838 connections, and 1,473 supplies. He also points out that Quarterly analyses of the town water continue to be made, and while the gathering ground continues to be kept under strict surveillance, the town will have a satisfactory supply.

191. He also reports that dairies, cowsheds and milk shops are fairly satisfactory.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
8,310	22·5	16·2	1·2	139

SUTTON COLDFIELD.

192. Dr. BOSTOCK HILL shows that this Borough is making very rapid strides as regards population, and he estimates, in the middle of the year, the population to have been 16,619. This shows an increase on that of the previous year of 984. The sanitary statistics are satisfactory, for with the exception of the birth-rate, which is slightly below the average, the death-rate and the Zymotic death-rate are practically identical with the average of the last five years. The rate of Infant Mortality is also satisfactory for a large Urban district, the figure being 101, compared with 103 in the previous year. Of the mortality from Zymotic disease, he says the figure is a very satisfactory one, eleven deaths being registered, compared with ten in the previous year. Of these, four were due to Whooping Cough, three to Measles, one to Diphtheria, and three to Diarrhœa. It will be seen, therefore, that there was no mortality from either Scarlet Fever or Typhoid Fever. No case of Smallpox was notified during the year. The incidence of Scarlet Fever was rather less than in 1902, 53 cases being notified, compared with 72 in that year. It will thus be seen that, as no deaths were registered, the cases were particularly mild in type. Measles and Whooping Cough showed some prevalence, judging from the mortality. Diphtheria was only responsible for six cases, and of these one proved fatal.
193. Referring to Phthisis, he says, "I regret again to have to report a somewhat large mortality from this disease. Thirteen deaths, the same number as in 1902, were recorded. This gives us a percentage on the total deaths of 6·5. This, compared with the country at large, is fairly satisfactory, though it is a terrible thing to contemplate that the mortality from a disease now proved to be preventible was greater than that of all the so-called infectious diseases put together."
194. The Report details the work done in connection with the extension of the sewerage system of the Borough, and shows that new sewers were laid in Jordan Road, College Road, and Britwell Road. Surface water drains were laid in Lichfield Road, Birmingham Road, Riland Road, and Mere Green Road, in order to prevent flooding in times of heavy rainfall, as this has caused much inconvenience in the neighbourhood, while in addition it causes constant dampness of the ground, rendering it undesirable for building purposes. He refers to an important advancement in the equipment of the Borough which has been made by the erection of latrines on the Lower Parade. He shows, also, that an increased activity took place in Scavenging, 1,181 ashpits and privies being emptied under the supervision of the Inspector of Nuisances, during the year. He also shows that 72 ashpit middens have been converted into water closets, compared with 47 in the previous year.
195. The Report gives detail of the action taken to keep slaughter-houses, dairies and cowsheds and other similar buildings in good sanitary repair; also the work done under the Factories and Workshops Act as regards the sanitation of Workshops, and gives a record of the number of new streets and buildings made and erected during the period under review.
196. Particulars of Vaccination in the Borough are also given, and the Report shows that in no district could infantile vaccination be more effectually carried out than in this Borough.
197. The Report concludes with a special account of the Meteorological Observations, supplied by the Borough Surveyor, and I have referred to these and others in my Report on the County as a whole.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
16,619	21·9	11·97	0·66	101

WARWICK.

198. According to the estimate of Dr. WILSON the population of this Borough is slowly declining. The death-rate was considerably lower than in the previous year, as was also the rate of infant mortality, the Zymotic death-rate being practically the same.

199. Including chickenpox, of which there were 86 cases, 216 cases of infectious disease were notified, of which five were Smallpox, seven Diphtheria, eighty-five Scarlet Fever, three Typhoid Fever, and one simple continued fever.

200. Referring to the Smallpox outbreak, Dr. WILSON says, "The first of the 5 cases of Smallpox notified occurred in April, and was that of a tramp, who, as he was found wandering round the town and looking very ill, was sent to the Workhouse, and two days afterwards developed the disease. He was promptly removed to the Joint Smallpox Hospital, and, owing to this and the other precautions taken, there was fortunately no further spread. The other 4 cases occurred just before the close of the year, 2 of them in Friar's Court, and the other 2 in the Workhouse. As reported fully at the time, both the patients from the town were employed at the Workhouse as cleaners, and it was discovered that from one of these women, who was found to be recovering from a mild and unsuspected attack, the other 3 patients contracted the disease, but how or where she caught the infection could not be ascertained. All 4 Patients were promptly removed to the Smallpox Hospital, re-vaccination and other precautionary measures were carried out, and the contacts with the two town cases were kept under observation, with the fortunate result that at the close of a fortnight I was able to report that the outbreak had been stamped out."

201. Scarlet Fever was of a very mild type, for out of 85 cases notified, none proved fatal. In connection with this it is recorded that a limited outbreak at Friars Court in the autumn was traceable to a case found attending school in the peeling stage which had not been notified, and in respect of this and another case, where there had been neglect to notify or call in a doctor, two persons were called before the Council to show cause why they should not be summoned, and were cautioned. Of the three cases of Typhoid Fever, one was imported. There was a somewhat severe outbreak of Measles in the early part of the year.

202. The general sanitary work is reported as having been well attended to. Cowsheds, milkshops, and dairies were systematically inspected, and the slaughter-houses and butchers' shops kept fairly clean and in compliance with the bye-laws.

203. Gent's Buildings, for which a closing order was obtained in the previous year, were pulled down, and the site has been occupied by new buildings, while it is reported that progress is being made with regard to dealing with other buildings in the Saltisford, which were condemned under the Housing of the Working Classes Act. A good many of these are now closed, and it is hoped that a demolition order will be obtained for all of them at an early date.

204. Forty-four new houses were erected during the year, while the sewers have been systematically flushed, and the public scavenging well attended to.

205. The report of the Sanitary Inspector is appended, which will be found in the summary in tabular form.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
11,880	22·6	14·0	1·01	122

RURAL DISTRICTS.

ALCESTER.

206. Dr. BROWNE is able to record this year satisfactory rates of all kinds. The death-rate is nearly 3 per thousand below the average of the last ten years. The rate of Infant Mortality is also satisfactory, though slightly higher than last year, while the Zymotic death-rate is also slightly higher than the very low one of 1902.

207. Scarlet Fever has not been unduly prevalent, fewer cases being notified of it than in 1902. There was an outbreak at Studley continued from the end of the previous year, which accounted for 38 cases. The other 65 cases occurred at irregular intervals in thirteen different localities. No less than 97 of the 103 were removed to the isolation hospital. Mr. BROWNE says, "The removal of the patients to the Hospital is almost invariably effectual in preventing the spread of the disease in the household attacked."

208. Only one case of Smallpox was notified, and this occurred in a tramp who had been spending a night in the Workhouse and was found next morning to be suffering from the disease. He was removed to the

Isolation Hospital provided for Smallpox, with his wife, after being re-vaccinated. All persons who had been in contact with him were detained, and no further spread of the disease occurred.

209. Diphtheria has been much less prevalent, though eighteen cases were notified. The disease was of a very mild type, as none of the cases proved fatal. Eighty-five bacteriological examinations were made in connection with this during the year.
210. One case of Typhoid Fever occurred, and this proved fatal, and it is somewhat remarkable that the origin of the disease could not be traced. Whooping cough was prevalent in parts of the district, and caused three deaths, and in relation to Measles, Mr. BROWNE says that an outbreak occurred in Arrow in January which did not extend to other parishes, and was cut short by closure of the schools.
211. Mr. BROWNE reports that he has systematically inspected parts of the district during the year, and has made special inspections of Bidford, Coughton and Studley, and submitted reports to the District Council thereon.
212. As showing the mortality from Scarlet Fever, of the 120 cases admitted to the Sanatorium, only one proved fatal. I particularly regret to notice that Mr. BROWNE says, "The question of the provision of a Disinfectant has not been again considered." He states, however, that the clothes worn by Scarlet Fever patients in the hospital are not returned to them on their leaving, while in certain cases where the patients have been treated at home the Stratford disinfectant has been used, or the clothes of the patients have been destroyed and replaced by new ones.
213. The Water Supply has apparently much improved, and the Alcester Waterworks Co. has since the early part of the year given a constant supply to their customers. Water has also been employed for flushing the sewers at Alcester.
214. Mr. BROWNE also reports that the Sewage Works at Alcester have been efficiently managed. The sewers have been well flushed, and have, on the whole, given no trouble. Scavenging has been regularly carried out at Alcester under the supervision of the Inspector, and at Bidford and Ipsley it was done by contract.
215. Two houses have been condemned as unfit for human habitation, one at Alcester and one at Ipsley, and both of these have been pulled down.
216. It appears that nothing has yet been done in this district in reference to carrying out the provisions of the Factories and Workshops Act. It is important, therefore, that the officers should commence work as early as possible, so that in the next year a full report of their condition may appear.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
11,400	22.19	12.1	0.61	90

ATHERSTONE.

217. Mr. MEARS says, "I am glad once more to be able to state that the year, on the whole, has been a very healthy one, the rate of mortality being exactly the same as the previous year, which, as I then stated, was the lowest since I have been your Medical Officer of Health."
218. Smallpox was introduced in February, as usual by a tramp, who was removed to the fever hospital which had been emptied previously of Scarlet Fever cases in order to allow of the isolation of Smallpox. The district is to be congratulated on the energetic measures taken by Mr. MEARS and his colleagues, which prevented a serious outbreak of the disease.
219. It is true that there have been a large number of cases of infectious disease notified, due, chiefly, to an extensive outbreak of Scarlet Fever, particularly in Atherstone, where 122 cases were reported. It is very satisfactory to note, however, that although this District used to be almost the home of Typhoid Fever, yet only two cases of this disease were notified.
220. Diphtheria was chiefly prevalent in Polesworth, eleven cases being notified from there, with one death. They occurred in various parts of the village, chiefly in the latter part of the year, and the subject is dealt with at some length by Mr. MEARS.

221. He gives very interesting particulars as to the cases isolated and his experience of isolation, with special reference to Scarlet Fever, and this I have dealt with in that part of my report dealing with the County as a whole.

222. He calls attention to the bad state of Polesworth, in reference to the want of Scavenging in that district, and says, "In justice to myself I should like to point out that these suggestions are not made by me on the principle of locking the stable door after the horse is stolen. As far back as March 11, 1890, when I presented my 5th Annual Report, I say, in referring to an outbreak of Diphtheria at Polesworth, when five deaths occurred, and quoting from a report, presented on December 17, 1889—'At Warton there has been one case and one death, and at Polesworth proper eight cases and four deaths. These cases are not confined to one particular locality, but are scattered about I found that in some places the drainage was defective, but what seems to me to be a very prevalent evil all through the village are large accumulations of ashes and refuse in the ashpits. In some cases the privies are very full and required cleaning out . . . But I think the evil might be considerably mitigated if a Public Scavenger were appointed.'

"I also, with Mr. Chipperfield, attended a Parish Meeting at Polesworth and strongly urged the necessity of a Public Scavenger. Again in my Annual Report for 1890, I say :—'The death rate is 21·73; five deaths have occurred from Scarlet Fever, two from Diphtheria, and one from Typhoid Fever and I think it is necessary that a Committee of the Authority should be formed to enquire into the whole question of the drainage of Polesworth.'

"Again in my Annual Report for 1893, I say, 'I consider, in this parish, attention should be given to the pollution of the river and the canal, and some more prompt and efficient removal of excrement ought to be instituted.'

"Again in my Annual Report for 1900, after a long report on many defects of drainage, badly constructed houses, etc., I say, 'In all parts of the parish there is no Public Scavenging, and even in properly constructed ashpits large accumulations are to be found. There is no doubt that public scavenging ought to be established and steps taken to deal with the sewage of Polesworth proper.'

"This Report seems to have had some temporary effect, for in my Report for 1901, I say, 'Steps are being taken to provide public scavenging for this parish.' But alas! only temporary, for in my Annual Report for 1902, I say, 'No steps are being taken for providing scavenging.'

"It will thus be seen that for fourteen years I have been urging the District Council to insist on Polesworth being provided with an efficient system of sewerage and scavenging."

223. He also refers to the necessity of measures being taken for preventing the pollution of the River Anker and the Canal, and says, "A general sewerage scheme for Polesworth is now under consideration, the Polesworth representatives having promised that it shall be proceeded with at once."

224. As regards works of a public nature, a site has been purchased for a new isolation hospital with 20 beds to be erected in Folly Lane, Grendon.

225. He also reports that the long expected water supply for Baddesley, Baxterley, Bentley and Merevale, with an additional supply for Atherstone, is completed.

226. The Report of the Inspector of Nuisances shows that much good work has been done in his department, 162 cases of structural defects having been dealt with. The Factories and Workshops Act was conscientiously carried out, while the common lodging houses have been inspected, as have also the dairies, cowsheds, milkshops, and canal boats.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
16,820	34·1	14·1	1·4	113

BRAILES.

227. Dr. FINDLAY records, as has become almost usual, a decreasing birth-rate, compared with the average for the last eight years, and a death-rate, though slightly higher than in the previous year, yet below the average of late years. The rate of infant mortality is satisfactory, while the Zymotic death-rate was very low.

228. The number of cases of infectious disease notified has been small, namely 31, and of these no less than 18 were due to Chickenpox. The other cases notified were as follows :—Diphtheria, 1 ; Typhoid Fever, 2 ; Scarlet Fever, 5 ; Erysipelas, 4 ; and Puerperal Fever, 1. Both the cases of Enteric Fever acquired their infection outside the District. Measles was prevalent in Brailes in September, while a few cases of Whooping Cough came to the notice of the sanitary staff. Diarrhoea did not produce a single death.
229. Though the infant mortality rate for the whole district has been satisfactory, Dr. FINDLAY calls attention to the fact that in the Blockley registration sub-district the infant mortality was very high, namely 200 per 1,000 births, and he says, "Taking the deaths of infants under one year old for the nine years, from 1895 to 1903 inclusive, I find they are equal to an infantile mortality of 186."
230. Referring to action taken to prevent the spread of disease, Dr. FINDLAY says, "The isolation hospital has been of use in isolating the cases of Scarlet Fever in the district which could not be isolated properly at home."
231. He calls attention to the danger of the spread of infection in schools by the practice of spitting on slates to clean them, and suggests that the attention of the new management committees be drawn to providing means for cleaning slates in schools with some disinfectant.
232. He reports that he has made a house-to-house inspection of several parts of the District, more especially on the Ilmington side.
233. Referring to Vaccination, though the table shows a large number of children still unvaccinated, Dr. FINDLAY says that there were only nine conscientious objections, and he believes that vaccination is well carried out in the District.
234. Referring to sanitary work completed, contemplated or required, he states that a scheme of continuing the existing water mains at Lower Brailes has been carried out. He reports that nothing has been done yet to improve the water supply of the village of Halford. The water supply of the village of Ilmington has been receiving attention. It is at present supplied from two springs, but he says, "I found on examination that the water supply from one of the springs is very liable to become contaminated, being brought part of the way in common agricultural pipes. I believe that it was this water which was the cause in the first instance of the outbreak of Diarrhoea in June ; afterwards, the disease seemed to be conveyed by personal contact with those suffering from the disease."
235. At Whichford a combined sewer and rain-water pipe has been laid for a considerable distance. At Little Cherington the public pump has been repaired. Dr. FINDLAY reports that at Stretton-on-Fosse the water supply is not yet satisfactory, as several of the wells are liable to become easily polluted. The sewer ditches have all been cleaned out.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
6,211	22·8	14·8	0·30	99

COVENTRY.

236. Mr. ILIFFE reports low birth and death-rates in this small district, during the year. Four cases of Smallpox occurred, all on the London Road. These were isolated at the Smallpox Hospital of the City of Coventry. Mr. ILIFFE says that he carefully endeavoured to find the origin of the contagion, but was unable to trace the source of the outbreak. He attributes it, however, to cases existing at the time in the City of Coventry.

237. There were no cases of Scarlet Fever, Measles, Chickenpox or Typhoid Fever reported. He also reports that the water supply is good and efficient, and the drainage throughout the district in good order.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
340	14·7	8·82	<i>Nil.</i>	200

CASTLE BROMWICH.

238. Dr. BOSTOCK HILL again shows satisfactory vital statistics for this district, though the death-rate was fractionally higher than in the preceding year. This he shows to be due to a somewhat increased death-

rate in the sub-division of Castle Bromwich. All the other sub-divisions have very low death-rates. The Infant Mortality rate is also low, being only 51 compared with 111 for the Rural districts of Warwickshire in 1902, the latest return available at the date of the Report.

239. The number of cases of Zymotic disease reported has again been low, the total number being 58, and of these no less than 31 were Chickenpox. Of the remainder, 22 were Scarlet Fever, 2 Diphtheria, 1 Smallpox, 1 Typhoid Fever, and 1 Puerperal Fever. The bulk of these cases, with the exception of the Chickenpox, occurred in Minworth, and most of the Scarlet Fever cases occurred there.

240. Both in the cases of Typhoid Fever and Diphtheria sanitary defects were discovered. Referring to the Typhoid Fever case, Dr. BOSTOCK HILL says, "I visited the premises, and found that pigs were kept, about which complaints had been made. There was an unventilated drain outfall on the roadside. Difficulty was found in remedying the defects, and at the present time negotiations between your Council and the Drainage Board are pending, by means of which efficient drainage of this and an adjoining cottage can be carried out."

241. The case of Smallpox occurred in Castle Bromwich, and Dr. BOSTOCK HILL says, "I was requested to see it in consultation with the medical attendant. I found that the man was undoubtedly suffering from Smallpox, though the disease was by no means marked. He has been vaccinated in infancy, but not recently, and I regret to say that after being removed to hospital the case terminated fatally. All the inmates of the house were re-vaccinated, and the greatest care was taken in disinfecting the premises and all possible removeable articles, and I am pleased to state that no other case occurred in the District. I was unable to trace the origin of the disease, but I found that the man had been, within the period of incubation, to the City of Birmingham, where several cases of Smallpox were known to exist at that period."

242. Referring to Sewage Disposal, Dr. BOSTOCK HILL says, "The difficulties to which I referred in my last report, which had prevented an earlier commencing of the scheme for the sewerage of Curdworth and Minworth, were overcome during the year, and at the close of 1903 the works were nearly completed. This will be of the greatest importance to the sanitary welfare of the two sub-divisions. I have been in great difficulties on more than one occasion during the year in knowing what to do with properties markedly insanitary, but which required the new sewers to enable them to be properly drained, and to be put in sanitary repair, and a glance at the table of notified cases of Zymotic disease in the Minworth district distinctly proves the importance of the completion of this work."

243. He further says, "Though the new sewers were practically completed at the end of the year, no work has yet been done in making the necessary house connections; but I hope that in the early spring all houses within the proper distance of them will be connected with them. In many instances I am quite sure it will be to the advantage of property owner and tenant alike for the present insanitary privy middens to be converted into modern water closets."

244. He again calls attention to the importance of Scavenging in the two sub-divisions of Castle Bromwich and Water Orton, and refers to the importance of providing ash receptacles of a portable type when the drainage re-arrangements are made in Curdworth and Minworth. He reports also, that no less than 32 privies have been converted into water closets during the year. A table shows the action taken as regards the Factories and Workshops Act, Vaccination, and the General Work of the Inspector.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
2,850	20·35	11·22	0·7	51

FARNBOROUGH.

245. Dr. TISDALL JOHNS has succeeded Mr. Francy as Medical Officer of Health for this District. He reports a slightly lower death-rate than in the previous year. There was no mortality from any of the infectious diseases or from Phthisis, though nine notifications under the Act had been received. Of these, seven were Searlatina. Only one death occurred under one year of age, and this gives a rate of infant mortality of only 35, less than one-third what it was in the previous year.

246. Dr. JOHNS reports that all the slaughter-houses and bake-houses have been inspected and found in good condition. He also says the water supply has been satisfactory.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,540	18·18	13·63	<i>Nil.</i>	35

FOLESHILL.

247. Dr. ORTON is able to record a birth-rate fractionally higher, and a death-rate considerably lower than in the previous year. The Zymotic death-rate is also much lower, while the rate of infant mortality is also lower, though still somewhat high.
248. The Report deals fully with the incidence of infectious disease, and records that on the whole fewer cases were notified. Smallpox was responsible for no less than 36 cases, of which 19 were in Bedworth, 13 in Foleshill, and 2 each in Exhall and Walsgrave.
249. The following is an account of the outbreak :—“ The first case that occurred in the District was that of a man employed as a labourer at the New Gas Works being erected by Coventry, at Rowley’s Green, Foleshill. This was in April, and he was removed to the temporary Smallpox Hospital at Exhall. On enquiry, it was deemed probable that he had contracted the disease at his work, as tramping labourers were constantly being set to work at the Gas Works, who would work for a day or two, and then tramp on again. The man was lodging at an inn at Longford, and difficulty was experienced in dealing with the adequate disinfection of the premises. Our second case was another man at Longford, a miner, who was a frequenter of public houses where the gas labourers visited, and he had thus, I considered, contracted the disease from the same source as the first case, viz., from some journeyman labourer employed at the Gas Works, who had had the disease in a mild unrecognized form. Our third case was that of a woman at Rowley’s Green, at whose house some of the gas labourers had lodged, and I personally visited and carefully inspected all the employees at the Gas Works, to see if any suspicious person were at work there. I failed, however, to discover any such, and I afterwards concluded that the labourer who had conveyed the infection to our district had passed on; and shortly after this date, I became aware of the fact that an epidemic has been started in Warrington, Lancashire, by a man who had journeyed from Foleshill, and who had been lodging at the house of our third case. Our succeeding four cases were the wife and children of the second case; and our other cases were all occasioned by contact with the cases already recorded, with the exception of a man and his child at Walsgrave, the former, in my opinion, having probably contracted the disease from some fellow workman at the Brickworks, where he was employed, the child contracting the disease from his father, and being removed to the Hospital fifteen days later. This batch of patients numbered fifteen in all, not including two suspects who were vaccinated and removed to the Hospital for observation, and the above constituted what we may term the Foleshill epidemic.
250. “ It is worthy of note that at the public house where the first case occurred, of six inmates, only one escaped contracting the disease, although that one was fellow lodger of the first patient, slept with him, and waited upon him during his illness before the disease was notified; whilst the others hardly, if at all, entered his room; the reason for the immunity enjoyed by the one being undoubtedly due to the fact that, having been a soldier, he had been successfully re-vaccinated upon three occasions.
251. “ Our second epidemic occurred at Bedworth, in the month of June, just at the time when the last Foleshill case was about to be discharged from the Hospital; the first patient being a woman who had contracted the disease from her sister, a resident of Bedworth, who had had the disease in a mild unrecognized form, caught at her work at Coventry, and all the succeeding cases were to be traced to this first one, the 2nd, 3rd and 4th being relations, the next few immediate neighbours, and the remainder contacts of these.
252. “ The two Exhall cases were also ascertained in September, through information received from Birmingham, to which city a boy had gone from Exhall, and had shortly afterwards developed Smallpox, which being concealed, gave rise there to an extensive epidemic. Upon my visiting the house, I found there two children who had had the disease for about six weeks, and were scabbing. As our Hospital was closed, and the children would have recovered in the course of a few days, it was determined to thoroughly isolate everyone in the house, upon the premises, until all danger of the infection had ceased. This was done, and no case of infection to anyone in the neighbourhood occurred.

253. "The compulsory notification of Chickenpox led, in at least one case, directly to the detection of a case of Smallpox, which otherwise might have escaped our vigilance. The medical practitioners of the District were also requested, at the expense of the Sanitary Authority, to notify me, by telegram, of any suspicious case coming under their notice, and in nearly every case that was removed to Hospital, I was enabled to see the patient before removal, and to share the responsibility of the notification. I also visited, at the request of medical men, several cases which, happily, did not prove to be Smallpox.
254. "Only one case ended fatally—that of a child who had never been vaccinated. In several of the cases vaccination had been performed after the disease had been contracted, and in all these, the symptoms were much mitigated."
255. In connection with this, one point deserves special notice, and that is the fact that the soldier enjoyed immunity from the disease by reason of having been successfully re-vaccinated on three occasions. I am of opinion that the District should be congratulated on the energy shown by the Sanitary Staff, and also at the success of the results achieved.
256. Measles, apparently, was very prevalent, as it produced no less than eight deaths, the greatest number of deaths from any Zymotic disease. Bills were posted and distributed among the householders warning them of the dangers from measles, and advising what precautions should be taken. Seven deaths, six of them being under one year, were recorded from Diarrhœa. This is below the average mortality, and is to be accounted for by the cold, wet summer.
257. Diphtheria and Membranous Croup were prevalent, 49 notifications being received of these two diseases, 21 from Bedworth, 3 from Exhall, 22 from Foleshill, and 3 from Walsgrave. I have already reported in my quarterly report to you on this matter, and Dr. ORTON in connection with my enquiry says, "I can only state my opinion that our apparent special liability to Diphtheria probably lay in the fact that, owing to our bad sewerage and drainage in Bedworth and Foleshill, there was so much surface pollution, and that, from this cause, the number of cases was so great. I have hope, however, that when our proposed sewerage schemes for these two parishes are carried out, the disease will show substantial diminution."
258. A very satisfactory feature of the Report is the diminution in the number of notifications of Typhoid and continued Fever. In 1903, 10 cases were notified; in 1902, 24; and in 1901, 49. Probably the main factor up to the present in this reduction, has been the improved water supply at Bedworth.
259. Twenty-six deaths occurred from Phthisis and other tubercular diseases, representing a total death-rate of 1·2. Dr. ORTON says, "This number of deaths from Tuberculosis is too high, and should be certainly diminished in our Rural district, now that our public sanitation is improving; but one feels bound to insist on personal sanitation, such as windows that will open, and unstopped chimneys being observed and encouraged. Fresh air is still only too much feared, especially in bedrooms."
260. Scarlet Fever and Whooping Cough were but little prevalent.
261. In connection with Isolation Hospitals, Dr. ORTON says, referring to the Smallpox hospital, "During the second epidemic, I tried the effect of the Red Light treatment, pasting all the windows over with red tissue paper. The result I thought was satisfactory, as the pocks did not develop so much as when the cases were treated by ordinary light, and the eye complications were decidedly lessened."
262. Referring to Disinfection, he says, "This work proved a very onerous one during the year, and taxed the time of Mr. Windass very severely during the early part of the Smallpox epidemic especially. The number of articles passing through the Disinfector amounted to 1,942, of which the greater number were Smallpox articles, viz., 1,346. Many Smallpox articles, and portions of bedding, were destroyed, and the owners supplied with new at the expense of the Sanitary Authority. The houses of the Smallpox patients were disinfected by fumigation and spray, after the removal to Hospital of each patient, and the hospital conveyance was disinfected by fumigation on each occasion."
263. Referring to the Factories and Workshops Act, 1901, Dr. ORTON records that both he and the Inspector of Nuisances have visited the various factories and workshops. Eighty-one visits have been made, and various defects which have been discovered have always received attention. Among other defects were:—Bad flooring, defective closets and ashpits, and insufficient closet accommodation. He says, "In the laundries at Keresley, we found some of the ceilings in a very bad state of repair, caused by the steam."

264. A case is recorded where the maximum penalty was enforced against a father of children who was concealing the fact that they had Smallpox.

265. The Water Supply appears to be improving, as more and more houses, both at Bedworth and Foleshill, are being supplied from the public mains.

266. The Sewerage of the District is also receiving attention, and the Report records that in December the Local Government Board held an Enquiry for an amended scheme for sewerage and sewage disposal for the Parish of Bedworth. A similar scheme for the Parish of Foleshill was also prepared at the latter end of the year.

267. The Report concludes with an account of the new buildings and alterations which had taken place in the various parishes, and I can unhesitatingly say that the Report is a record of good work done on the part of all members of the Sanitary Staff, attended, on the whole, with excellent results.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
17,838	37·1	14·5	1·4	134

MONKS KIRBY.

268. Dr. O'CONNOR estimates a population slightly lower than at the census of 1901. The birth-rate was above the average for the previous four years, and was the highest recorded since 1900. The death-rate is somewhat about the average, while the rate of Infant Mortality was exceptionally low.

269. The number of cases notified was very small, namely seven, of which 2 were Erysipelas, and 5 Scarlet Fever. No fatality resulted. Dr. O'CONNOR reports that spraying with Formic-Aldehyde solution is now employed in lieu of the less reliable method of disinfection by means of fumigants.

270. The Water Supply from the public well at Copstone Magna proved to be a first-class drinking water, but two samples from the public pump in Pailton were heavily polluted with organic matter, as were also three samples from a well at Wibtoft. At Pailton a notice was fixed to the pump warning the public against drinking the water, unless boiled.

271. At Monks Kirby, Pailton, and Stretton a number of defective gratings which permitted escape of sewer gas and gave rise to nuisance, have been replaced by proper trapped earthenware gullies. The slaughter-houses, four in number, were inspected.

272. As regards the Factories and Workshops Act, Dr. O'CONNOR reports that with the exception of four bakehouses, there are none in the district. These, he says, are properly kept and periodically whitewashed.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,556	25·7	14·1	<i>Nil.</i>	25

NUNEATON.

273. Dr. A. A. WOOD is able to record very satisfactory rates during the past year. The death-rate and the Zymotic death-rate are both low, and indeed the only death from the seven principal Zymotic diseases was one from Whooping Cough.

274. This disease was prevalent in Wolvey and Astley in the early part of the year. The only other cases of infectious disease notified were an imported case of Scarlet Fever at Astley, two cases of Erysipelas, and three cases of Diphtheria, also at Astley.

275. Referring to these, Dr. WOOD says, "No obvious cause could be discovered, but attention to drains from kitchens was advised." The case at Astley he says was probably due to neglect of drains in a farm-yard, and consequent accumulation of offensive liquid refuse from a manure heap.

276. The Water Supply, which is from wells, is said to be generally satisfactory. An arrangement has been made with the Nuneaton Urban District Council to receive cases of infectious disease, excepting Smallpox, at the Urban District Hospital.

277. One very important point is referred to by Dr. WOOD, namely the necessity for the adoption of Bye-laws. He explains that the development of Arley as a colliery centre will entirely alter the rural character of this part of the district. In this I concur, and I am of opinion that no time should be lost in the adoption of the code as sanctioned by the Local Government Board.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,554	24·5	12·3	0·64	52

STRATFORD-ON-AVON.

278. Dr. THOMPSON says that 1903, like the preceding year, has been characterised by unusually low mortality rates. There has also been a great falling-off from the average in the case of infectious disease notified, notably due to a decrease in the cases of Scarlet Fever, of which there was less than one per month. All the cases of Scarlet Fever, with the exception of one, were removed to hospital. Three cases of Diphtheria were notified, two at Henley and one at Wellesbourne, while a case of Membranous Croup was notified from Kington, and removed to hospital. One case of Typhoid Fever was notified from Hampton Gorse, and this was imported, as the patient came home ill.

279. Referring to Water Supply, Dr. THOMPSON says, "The public water supplies of Alveston, Kington, Henley-in-Arden, Combroke and Ullenhall are regularly analysed, and continue to be found satisfactory. At Alveston and Tiddington the general use of water from the mains should be enforced, as the local wells can never be considered safe. I have heard no complaints in the past year as to the Alveston water having a tarry flavour from the coating of the pipes, so this drawback to the use of the water is probably done away with."

280. Referring to Sewerage and Drainage, he reports that the drainage of Wellesbourne will probably be carried out in 1904, and says, "It will be a vast improvement to restore the brook between the two parishes to a sewage-free condition; to run the sewage of a large village into a stagnant brook close to dwelling-houses must necessarily be a detriment to the health of those in the vicinity, even where such insanitation falls short of demonstrating its existence by producing epidemic disease. Kington Sewage Scheme will also be soon in course of construction."

281. Tables are given showing the work done under the Factories and Workshops Act, and the Vaccination Acts, and as regards this latter, I may remark that the Table includes the Urban district of Stratford-on-Avon. It would appear of the 462 births registered, 255 were successfully vaccinated. Twenty-four certificates of conscientious objection were granted, and 140 cases remained unvaccinated at the date of the return.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
10,589	22·0	14·3	0·28	94

TAMWORTH.

282. Dr. FAUSSET records a birth-rate practically identical with the two previous years, a death-rate a good deal higher than in the previous year, and an infant mortality rate of 130, which must be considered rather high for such a district. He gives a table showing that the number of deaths from Phthisis was larger than in any of the previous ten years.

283. As regards the prevalence of infectious disease, Dr. FAUSSET records that Measles was very prevalent in parts of the District, and was not confined to the more populous parishes. Some of the schools were closed and subsequently disinfected and cleansed. There were only four fatal cases, one of which occurred in a van.

284. Scarlet Fever, however, was the disease which was specially epidemic in the district, 200 cases being reported, of which number 157 were removed to the Isolation Hospital. This disease has been prevalent now for three years, and it appears to have gone, during that period, in a wave all over the District.

285. Diphtheria was notified in 11 instances, and, as the hospital was full of other cases, all cases of this disease were treated at their own homes. Of the eleven cases, three died. As usual, Whooping Cough is reported to have been in many instances secondary to Measles, and to have been prevalent, five deaths having occurred.

286. The Report records a good many sanitary improvements effected during the year, notably at Amington and Stonidelf, where sewers were extended to meet the requirements of new houses. At Bolehall and Glaseote cases of overcrowding were investigated, and notices served with regard to dirty premises, keeping of animals, etc. In Newton Regis three houses were reported as unfit for human habitation and closed, while in Wilnecote glazed stoneware sinks were substituted for defective brick ones in several instances. Three old cottages are to be closed as unfit for human habitation.
287. At Kingsbury the sewer was extended from Wood End to Bolter's Lane, and most of the houses in the village of Hurley have been connected with the new sewer.
288. Information is given as regards the Isolation Hospital, into which it is stated 327 patients were admitted during the year. Referring to this, Dr. FAUSSET says, "As there is no convalescent block, and the patients have to be discharged from the acute wards, there have unfortunately been, in some instances, what are known as 'return' cases." This matter is referred to in my Report on the County as a whole.
289. Dr. FAUSSET also draws attention to the want of an observation ward.
290. Referring to Water Supply, Dr. FAUSSET reports that the parishes of Amington and Stonidelf, Bolehall and Glaseote, Wilnecote, and Castle Liberty, are within the waterworks area and are well supplied with water, as are also a part of the parish of Shuttington and the hamlet of Dosthill in the parish of Kingsbury. He also reports that the parish of Kingsbury and the hamlets of Bodymoor Heath, Cliff, Coton, and Halloughton derive a plentiful supply of water from the Dumbles Springs, but that the water at Broomcroft Farm and at the canal cottages at Bodymoor Heath is not satisfactory, and that this matter will require attention.
291. He also reports that a scheme has been adopted for supplying the remaining hamlets of Hurley, Hurley Common, Wood End, Edgehill, and Whateley with water by the Dugdale Trustees from their reservoir at Bentley.
292. Referring to Sewerage and Sewage Disposal, he says, "On 7th March, 1902, your Sewage Disposal Committee instructed your Surveyor to obtain particulars of any places where outfall works for dealing with the sewage from the parishes of Bolehall and Glaseote, Wilnecote, and Fazeley could be constructed, and similar particulars for dealing with the sewage from Bolehall and Glaseote, and Wilnecote only. Your Committee also met on 24th November, 1902, and nothing having been done, your Surveyor was directed to at once carry out the instructions given to him on the previous March 7th.
- "A meeting was also held on 8th January, 1903, when your Surveyor explained the schemes he had prepared, but as such a large outlay was involved, your Committee recommended that his report be printed, and a copy of such report handed to each member of your Council, which was accordingly done.
- "The need for a scheme for dealing with the sewage of these parishes, which, with the exception of Fazeley, are in the Warwickshire portion of the district, is still very pressing. The question has been brought repeatedly under your notice, and its urgency as well as the difficulties which have arisen to prevent the carrying out of the scheme, are matters which you are well acquainted with, and have been disagreeably reminded of from time to time by payments for damages arising from sewage pollution having to be made by your Council, due to the want of a proper system of sewerage and sewage disposal works.
- "This refers more particularly to the parishes of Bolehall and Glaseote and Wilnecote, including Two-gates, where, as has been pointed out in previous reports, there is need of immediate action being taken to obviate the nuisance and danger to health arising from the stagnation of the sewage in the sewers and ditches, and to prevent the pollution of the brook courses and rivers in these populous parishes."
293. Referring to the pollution of the River Tame, Dr. FAUSSET says, "There seems to be an improvement in the condition of the River in dry weather, but during wet weather there is still great room for improvement, and this is borne out by the appearance and condition of the fields situate alongside the River after a flood has gone down."
294. He also reports that negotiations are proceeding for the purchase of Comberford Weir.
295. The Factories and Workshops Act appears to have been carried out satisfactorily. In conclusion

Dr. FAUSSET says, "There are at least five important questions which will require your careful attention during the present year, viz.—

"1.—The carrying out of the remainder of the scheme for the removal of the weirs.

"2.—The carrying out of a scheme of sewerage and sewage disposal for Bolehall and Glaseote, Wilnecote, and Fazeley; or for Bolehall and Glascote, and Wilnecote only; and the diversion of the sewage from the Staffordshire Moor.

"3.—The carrying out of a scheme of a water-supply for the remainder of the parish of Kingsbury.

"4.—The provision of an improved supply of water for the parishes of Croxall and Edingale.

"5.—The continuation of the measures already undertaken with regard to the prevention of the pollution of the river Tame."

296. Appended to the Report is the annual return of the Inspector of Nuisances, giving details as regards the removal of house refuse, testing of drains, inspection of dairies, cow-sheds, milk-shops and slaughter-houses, the disinfection of houses after infectious disease, and the inspection of slaughter-houses, canal boats, etc. I may add that this part of the work seems to be very efficiently carried out in this district.

VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
13,040	35·8	15·33	1·84	130

RURAL DISTRICTS IN THE MID-WARWICKSHIRE COMBINED DISTRICTS, INCLUDING MERIDEN, RUGBY, SOLIHULL, SOUTHAM AND WARWICK.

MERIDEN.

297. Dr. WILSON says, "With the exception of the prevalence of Measles and Whooping Cough in some few of the parishes, the general health of the district has continued to be very satisfactory, for not only is the general death-rate considerably below the average of previous years, but the rate of infant mortality and the death-rate from Zymotic disease are also very low."

298. Altogether 76 cases of infectious disease were notified, including 1 of Smallpox, 11 of Diphtheria, 33 of Scarlet Fever, 2 of Typhoid Fever, 1 of Puerperal Fever, 12 of Erysipelas, and 16 of Chickenpox.

299. The single case of Smallpox occurred at the Workhouse in May in a tramp, and was isolated there. It was fortunate that there was no further spread of the disease. The 11 cases of Diphtheria (two of which proved fatal) were notified from Coleshill, Nether Whitacre, and Allesley.

300. Referring to the question of hospital accommodation, Dr. WILSON says, "I have to report that the Joint Smallpox Hospital erected in conjunction with the Solihull District was practically completed at the close of the year. Pending its completion, an agreement was entered with the King's Norton and Yardley Joint Hospital Committee to receive any cases from the district, but fortunately none cropped up. With regard to the isolation of other cases of infectious disease, a public enquiry was held by the County Council in May, when it was stated in evidence that until the Yardley District Council have decided whether they will erect a hospital for themselves or elect to remain in combination with Solihull, so far as the question of combination is concerned, the hands of this Council are practically tied, and so the inquiry was adjourned *sine die*. Personally, I have always advocated combination with Solihull, or with Solihull and Yardley on equitable terms, because I am of opinion that the erection and management of a fully-equipped hospital on the lines laid down by the Local Government Board to meet the sole requirements of such a small district as Meriden would entail such a large annual outlay as would far outweigh any advantages to be gained. Meanwhile an agreement has been entered into with the Coventry Corporation to receive any cases of Scarlet Fever into their hospital, so long as there is room, but judging from past experience it is only in very rare or exceptional cases of disease that hospital isolation would become necessary."

301. Referring to works of a public nature, it would appear that a large instalment of the scheme of drainage for Hampton-in-Arden, referred to in the last annual report, has been completed, while the scheme of water supply for Nether Whitacre has also been carried out.

302. The Report of the Surveyor and Sanitary Inspector is annexed, which shows that the Factories and Workshops Act has been properly administered, that public works of sewerage and drainage have been carried out in Hampton and Nether Whitacre, and that slaughter-houses and butchers' shops have also been carefully inspected.

RUGBY.

303. Dr. WILSON is able to report satisfactorily on the health of this large Rural district, only seven deaths being attributable to the seven principal Zymotic diseases, and only 71 cases being notified under the Act. One case of Smallpox was notified at New Bilton in a woman who was promptly removed to the Joint Smallpox Hospital. A baby (unvaccinated at the time) was promptly vaccinated, and although taken to the hospital with the woman proved to be immune from infection. The case was probably associated with infection at Coventry. Twelve cases of Diphtheria occurred, of which one proved fatal. The disease was not epidemic in any particular place, but occurred in different families in New Bilton, Easenhall, Newton, Wolston and Woolscott. Only 27 cases of Scarlet Fever were notified, none of which proved fatal.

304. Twenty-four cases of Typhoid Fever were notified, of which one proved fatal. This low mortality shows the disease to have been of a mild type. The most important outbreak was at Long Lawford, and occurred towards the close of July in a row of cottages supplied with water from a well, which was found to be polluted, and probably specifically polluted. Three of the patients were removed to the St. Cross Hospital, and special arrangements were made for nursing the other cases at their own homes. Systematic scavenging and disinfection were carried out, and the outbreak was speedily checked. A few other cases occurred later on in another part of the village where the well water was also of doubtful quality.

305. In respect to public water supplies, Dr. WILSON reports that mains are now being laid on to supply the village of Brownsover. The public well at the top end of Newbold-on-Avon has been closed. He reports that negotiations for a public supply for Grandborough (to which reference was made in his last annual report) have, unfortunately, fallen through.

306. The Report of the Sanitary Inspector, which is annexed, shows that the various cowsheds and milk shop orders have been properly carried out, that the slaughter-houses have been duly inspected and found satisfactory, and that the Factories and Workshops Act has been properly administered.

SOLIHULL.

307. Dr. WILSON reports that the Zymotic death-rate was exceedingly low, although the number of cases of Zymotic disease notified was above the average, due chiefly to the prevalence of Chickenpox.

308. One case of Smallpox occurred at the Workhouse, and was promptly removed to the Joint Smallpox Hospital at Hollywood under an agreement made with the Joint Hospital Committee of Kings Norton and Yardley, and as every other precaution was taken, there was fortunately no further spread of the disease.

309. Eight cases of Diphtheria occurred, namely 2 in Solihull, 1 in Olton, 3 in Tanworth, 1 in Lapworth, and 1 in Balsall. Five cases of Typhoid occurred, 4 in Solihull parish and 1 in Tanworth. All these recovered.

310. Dr. WILSON reports that the new Joint Smallpox Hospital for Solihull and Meriden was finished before the close of the year.

311. He also reports that the provisions of the Factories and Workshops Act have been duly carried out. One old bakehouse in Solihull which was damp was abolished, and a new bakehouse erected on the same site.

312. The Surveyor's Report, which is annexed to the Report, shows that a large and valuable work has been done in the way of house scavenging, which has taken place both in Solihull and Knowle parish. Street watering and flushing has also been carried out in these districts.

313. The Sanitary Inspector reports that slaughter-houses and canal boats have been duly inspected, and that the Factories and Workshops Act has been put into operation, several notices having been served for limewashing and cleansing.

SOUTHAM.

314. In the year 1902 the most noticeable fact in the health statistics of this District was the high rate of infant mortality, and it is very satisfactory, therefore, to note that this has fallen in 1903, to the satisfactory rate of 84 per thousand. The Zymotic rate is fairly satisfactory, being little more than last year.
315. The number of cases notified Dr. WILSON reports to be somewhat above the average. These consisted of 3 cases of Smallpox, 79 of Scarlet Fever, 6 of Diphtheria, 2 of Typhoid Fever, 2 of Puerperal Fever, 5 of Erysipelas, and 19 of Chickenpox.
316. The three cases of Smallpox were notified from Bascote Heath and the cases were all comparatively mild. The infection was contracted from a woman who came from West Bromwich, and who, after her return, and when her husband sickened with the disease, was found to be suffering from a mild attack during the visit. Her sister and her sister's husband with whom she was staying, and also a child in another house which she had visited, contracted the disease, but owing to the timely information obtained from West Bromwich the three cases were discovered when they were just falling ill with the disease, and were promptly removed to the isolation hospital. Vaccination and re-vaccination of all contacts was also carried out, and other precautions taken, and there was no further spread of the disease.
317. The Scarlet Fever cases occurred chiefly in Harbury parish, 43, or more than half, being notified from there. Owing to the disease threatening to become more prevalent, in July Dr. WILSON gave a certificate to close the schools there for a time; but this does not appear to have arrested the epidemic, as he says, "Scattered cases kept cropping up after the summer holidays, and till towards the close of the year."
318. One of the cases of Typhoid Fever was imported, and the other was associated with a polluted well at Bishops Itchington.
319. Concerning works of a public nature carried out during the year, Dr. WILSON reports that new drains or sewers have been laid at Fenny Compton, Harbury, Gaydon, Priors Marston, and Bishops Itchington, while special attention has been paid to the public water supplies of Napton, Bishops Itchington, Stockton, Harbury and Lighthorne. Owing to the exceptionally heavy rainfall of the year, there has been nowhere any complaint of scarcity of water, either in respect to wells or public supplies.
320. He reports also, that the Factories and Workshops Act has been duly carried out, and that the various workshops, workplaces and bakehouses have been kept in a fair sanitary condition.

WARWICK.

321. Both the Zymotic death-rate and the rate of infant mortality were higher than in the previous year, while the birth-rate was particularly low. Three of the deaths were due to Measles, one in Stoneleigh parish, one in Cubbington, and one in Old Milverton, and Dr. WILSON says that the disease threatened to become so prevalent that he gave certificates for the closing of schools at Leek Wootton, Westwood, Hunningham, Barford, Sherbourne, and Bubbenhall. Two deaths also occurred from Whooping Cough, one in Hatton and the other at Budbrooke, and both were associated with an outbreak of the disease which necessitated the closing of the Hatton Schools in February. Twenty-five cases of Scarlet Fever occurred, of which one proved fatal. One of the cases of Diphtheria also proved fatal. It is satisfactory to note that there was not a single case of Typhoid Fever notified in the District.
322. The Report of the Surveyor and Inspector of Nuisances shows that the public water supply of Bubbenhall was overlooked and new pipes laid to secure the supply from risk of pollution. Settling tanks at Cubbington, New Cubbington, Barford and Whitnash have been cleansed, and the necessary repairs executed. Trapped gullies substituted for open catch pits at Stoneleigh, Wappenbury, Tachbrook, Offchurch, Ashow, Eathorpe, Cubbington, and Hunningham, while the whole of the bakehouses on the register are reported to have been well kept.

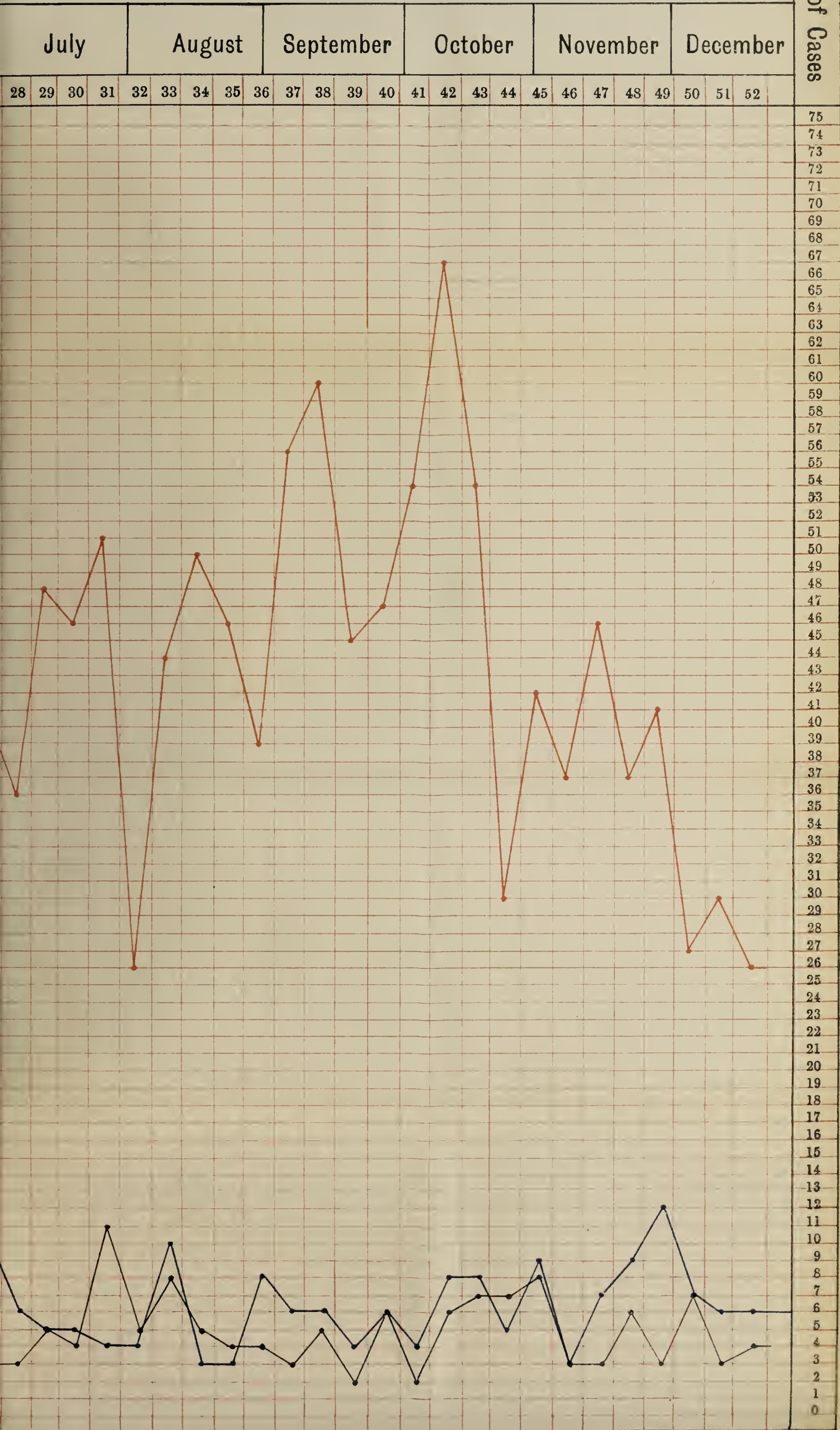
VITAL STATISTICS.

	Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
Meriden	11,480	21·1	13·2	0·61	82
Rugby	15,810	24·9	13·6	0·44	119
Solihull	15,220	23·0	11·8	0·46	71
Southam	9,900	24·0	15·3	1·21	84
Warwick	11,610	18·8	11·3	0·86	132

Chart shewing the number of cases notified each week
and Typhoid Fever (black) in the



of the year of Scarlet Fever (red), Diphtheria (blue),
administrative County in 1903.





A. TABLE OF DEATHS during the Year 1903, in the URBAN SANITARY DISTRICTS of the COUNTY OF WARWICK, classified according to Diseases and Ages, and shewing also the Area and Population of such Districts, and the Births therein during the Year, together with Birth, Death, and Zymotic Rates, and the Rate of Infant Mortality.

DISTRICTS.	AREA IN ACRES.	Population per Square Mile.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infant Mortality under 1 year to Registered Births per 1,000.	POPULATION AT ALL AGES.		Registered Births.	DEATHS AT SUBJOINED AGES.						MORTALITY FROM SUBJOINED CAUSES.																																		
							Census 1901.	Estimated to middle of 1903.		All Ages.	Under 1.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Membranous Croup.	Group.	Typhus.	Fever.		Epidemic Influenza.	Cholera.	Plague.	Diarrhoea.	Enteritis.	Puerperal Fever.	Erysipelas.	Other Septic Diseases.	Phthisis.	Other Tubercular Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Pleurisy.	Other Diseases of Respiratory Organs.	Alcoholism. { Cirrhosis of Liver.	Venereal Diseases.	Premature Birth.	Diseases and Accidents of Parturition.	Heart Diseases.	Accidents.	Suicides.	Diseases of Female Organs.	All other Causes.	All Causes.	
																							Typhus.	Enteric.																										Other Continued.

B. TABLE OF DEATHS during the Year 1903, in the RURAL SANITARY DISTRICTS of the COUNTY OF WARWICK, classified according to Diseases and Ages, and shewing also the Area and Population of such Districts, and the Births therein during the Year, together with the Birth, Death and Zymotic Rates, and the Rate of Infant Mortality

[illegible]

D. TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS coming to the knowledge of the

Medical Officers of Health during the year 1903, in the URBAN SANITARY DISTRICTS of the COUNTY OF WARWICK,

classified according to DISEASES, AGES AND LOCALITIES.

DISTRICTS.	POPULATION AT ALL AGES.		Registered Births.	CASES NOTIFIED AT SUBJOINED AGES.						NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITALS.																	
	Census 1901	Estimated to middle of 1903.		At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Smallpox.	Cholera.	Diphtheria.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Chicken Pox.	Smallpox.	Cholera.	Diphtheria.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Plague.			
ASTON MANOR ..	77,316	79,417	2,282	606	10	139	262	96	97	2	31	..	44	8	59	383	..	77	..	..	4	..	31	..	..	..	..	248	..	..	..	..	..	..	..	..	..
BULKINGTON ..	1,548	1,582	45	12	..	4	5	1	2	..	..	..	1	2	2	5	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
ERDINGTON ..	16,366	18,724	483	195	4	28	73	27	56	7	20	..	30	..	29	52	..	30	..	..	4	30	20	..	..	..	..	30	..	..	..	..	..	..	..	..	..
KENILWORTH ..	4,544	4,630	100	59	..	15	29	4	10	1	..	..	3	..	6	36	..	2	..	..	..	12	..	..	2	..	..	36	..	..	..	..	..	..	..	..	..
NUNEATON AND CHILVERS COTON }	24,995	27,182	935	238	6	96	92	15	27	2	12	..	10	2	19	96	..	8	..	..	2	89	12	..	..	..	..	51	..	..	..	..	..	..	..	..	..
ROYAL LEAMING- TON SPA }	26,888	27,017	487	333	10	102	166	19	28	8	1	..	12	1	36	81	..	2	..	..	..	200	1	..	5	..	..	62	..	..	..	..	..	..	..	..	..
RUGBY	16,830	18,220	422	268	4	64	130	36	33	1	9	..	23	1	19	208	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
STRATFORD-ON-AVON	8,310	8,310	187	62	1	12	41	3	4	1	2	..	..	..	3	56	..	1	..	..	..	..	2	..	..	..	1	56	..	1	..	..	..	..	..	..	..
SUTTON COLDFIELD	14,264	16,619	364	98	2	28	47	10	11	..	..	..	6	..	3	53	..	2	..	..	..	34	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..
WARWICK	11,889	11,880	269	216	6	76	84	10	35	5	5	..	7	..	29	85	..	3	..	1	..	86	5	..	4	..	70	..	1	..	..	..	..	..	..	..	..
TOTALS..	202,950	213,581	5,574	2,087	43	564	929	221	303	27	80	..	142	14	205	1055	..	125	..	1	12	453	71	..	11	..	1	584	..	2	..	..	..	..	..	..	..

E. TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS coming to the knowledge of the Medical Officers of Health during the year 1903, in the RURAL SANITARY DISTRICTS of the COUNTY OF WARWICK,
classified according to DISEASES, AGES, AND LOCALITIES.

DISTRICTS.	POPULATION AT ALL AGES.		Registered Births.	CASES NOTIFIED AT SUBJOINED AGES.						NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITALS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Census 1901.	Estimated to middle of 1903.		At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Smallpox.	Cholera.	Diphtheria.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Chicken Pox.	Smallpox.	Cholera.	Diphtheria.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Plague.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
ALCESTER ..	11,392	11,400	253	130	1	31	72	10	12	4	1	..	18	..	6	103	1	1	..	1	97

F. TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS coming to the knowledge of the Medical Officers of Health during the year 1903, in the COUNTY OF WARWICK, classified according to DISEASES, AGES, AND LOCALITIES.

DISTRICTS.	POPULATION AT ALL AGES.		Registered Births.	CASES NOTIFIED AT SUBJOINED AGES.							NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITALS.															
	Census 1901.	Estimated to middle of 1903.		At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Smallpox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Chicken Pox.	Smallpox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Plague.		
URBAN SANITARY DISTRICTS }	202,950	213,581	5,574	2,087	43	564	929	221	303	27	80	..	142	14	205	1055	..	125	..	1	12	453	71	..	11	..	1	584	..	2	..	..	..	..	..	..
RURAL SANITARY DISTRICTS }	144,743	147,758	3,947	1,525	36	409	788	107	173	12	50	..	139	5	101	872	..	50	..	2	10	296	43	..	5	1	..	533	..	4	..	..	..	..	..	..
TOTALS..	347,693	361,339	9,521	3,612	79	973	1717	328	476	39	130	..	281	19	306	1927	..	175	..	3	22	749	114	..	16	1	1	1117	..	6	..	..	..	..	..	..

I. RETURN, shewing the number of Births Registered, together with the number of such cases successfully Vaccinated or otherwise disposed of in the Districts of the COUNTY OF WARWICK during the year ending 30th June, 1903.

VACCINATION DISTRICTS.	No. of Births Registered during the year ending 30th June, 1903.	No. of these cases successfully Vaccinated.	Insusceptible of Vaccination.	Died before Vaccination.	No. of Conscientious Certificates.	Cases under Postponement.	Removals to other Districts out of the Union.	No. of cases not to be found.	Number of cases remaining Unvaccinated at date of this Return.
URBAN DISTRICTS.									
Aston Manor... ..	2,319	1,601	6	265	3	71	33	242	98
Bulkington									
Erdington	507	423	...	40	7	8	10	10	9
Kenilworth									
Nuneaton and Chilvers Coton }									
Royal Leamington Spa	551	447	1	49	31	6	8	6	3
Rugby									
Stratford-on-Avon ...									
Sutton Coldfield ...	384	321	2	24	1	17	2	10	7
*Warwick	393	326	4	29	13	4	3	7	7
RURAL DISTRICTS.									
Alcester	280	241	...	16	17	1	2	3	...
Atherstone	646	427	...	62	42	30	19	24	42
Brailes									
Castle Bromwich ...	68	62	...	2	...	1	...	2	1
Coventry									
Farnborough... ..	31	23	...	1	4	1	...	2	
Foleshill	660	510	...	60	79	2	4	5	
Meriden									
Monks Kirby									
Nuneaton									
Rugby									
Solihull	343	302	3	9	4	...	5	7	13
Southam									
Stratford-on-Avon ...									
Tamworth									
Warwick									

NOTE.—* Embraces Urban and Rural.

1.

[illegible]

TABLE IX.

METEOROLOGICAL OBSERVATIONS taken at the Park Lodge and Council House, Sutton Coldfield, during the Year ending 31st December, 1903, by the Park Forester (Mr. H. HARLOND).

Lat. : 52 deg. 33 mi. 22 sec., N. Long. : 1 deg. 49 mi. 42 sec., W.
Height of Rain Gauge above Sea Level, 370·5 feet.

MONTH.	RAINFALL.			BAROMETER.				THERMOMETERS.										SUNSHINE.		MONTH.
	Total Depth in inches.	Number of days on which Rain fell.	Greatest fall in 24 hours.	Highest Corrected Readings.		Lowest Corrected Readings.		IN SHADE.						Highest Readings in Sun.		Lowest Readings on Grass.		Hours.	Mins.	
				Inches.	Date.	Inches.	Date.	Highest Readings.		Lowest Readings.		Mean Temperature for the Month.	Degrees.	Date.	Degrees.	Date.				
								Degrees.	Date.	Degrees.	Date.									
January ..	2·220	18	·620	30·629	14th	29·310	10th	52·0	6th	14th	37·7	29th	68·3	29th	11·6	14th	36	51	January	
February .	0·990	5	·410	30·576	17th	29·340	27th	57·8	10th	18th	41·2	10th	91·0	10th	19·0	18th	68	28	February	
March	4·380	20	·880	30·217	31st	28·962	26th	62·5	26th	11th	42·9	19th	106·5	19th	24·5	11th	102	11	March	
April	1·540	14	·470	30·417	18th	29·315	27th	58·5	26th	18th	42·5	30th	108·2	30th	22·3	17th	141	8	April	
May	1·930	18	·480	30·488	24th	29·309	5th	75·5	23rd	13th	55·7	23rd	123·7	23rd	25·6	13th	139	34	May	
June	1·970	8	·640	30·510	4th	29·652	19th	81·0	28th	21st	54·9	28th	132·9	28th	27·0	21st	154	11	June	
July	2·610	13	1·160	30·383	10th	29·642	17th	85·7	11th	8th	59·1	12th	128·2	12th	32·0	8th	160	31	July	
August . . .	4·280	18	·890	30·235	26th	29·150	15th	73·2	9th	22nd	56·3	5th	126·2	5th	33·0	22nd	133	16	August	
September .	3·240	14	·730	30·560	15th	29·511	11th	71·5	2nd	13th	54·5	6th	121·5	6th	30·0	16th	172	9	September	
October . . .	5·520	29	·910	30·125	18th	29·027	12th	64·0	1st	24th	51·6	4th	108·6	4th	28·1	24th	71	40	October	
November .	1·860	17	·630	30·636	5th	29·160	28th	54·0	24th	19th	42·3	2nd	86·0	2nd	19·5	19th	62	52	November	
December .	1·870	17	·610	30·223	21st	29·076	8th	48·5	23rd	30th	36·5	5th	64·0	5th	18·2	31st	23	47	December	
TOTALS	32·410	191								MEAN FOR THE YEAR			47·9	TOTAL			1266	38		

W. A. H. CLARRY, Borough Surveyor.

JUNE, 1904.

Warwickshire County Council.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER

OF HEALTH,

For the Year 1903.